Maintenance Guide

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The proper names of the Windows operating systems are as follows:

- Microsoft® Windows® 95 operating system
- Microsoft® Windows® 98 operating system
- Microsoft® Windows® Millennium Edition (Windows Me)
- The product names of Windows® 2000 are as follows:
  Microsoft® Windows® 2000 Advanced Server
  Microsoft® Windows® 2000 Server
  Microsoft® Windows® 2000 Professional
- The product names of Windows® XP are as follows:
  Microsoft® Windows® XP Professional
  Microsoft® Windows® XP Home Edition
- The product names of Windows Server™ 2003 are as follows:
  Microsoft® Windows Server™ 2003 Standard Edition
  Microsoft® Windows Server™ 2003 Enterprise Edition
  Microsoft® Windows Server™ 2003 Web Edition
- The product names of Windows NT® 4.0 are as follows:
  Microsoft® Windows NT® Server 4.0
  Microsoft® Windows NT® Workstation 4.0

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How to Read This Manual

The following set of symbols is used in this manual.

⚠WARNING

This symbol indicates a potentially hazardous situation that might result in death or serious injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

⚠CAUTION

This symbol indicates a potentially hazardous situation that might result in minor or moderate injury or property damage that does not involve personal injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

* The statements above are notes for your safety.

Important

If this instruction is not followed, paper might be misfed, originals might be damaged, or data might be lost. Be sure to read this.

Preparation

This symbol indicates information or preparations required prior to operating.

Note

This symbol indicates precautions for operation, or actions to take after abnormal operation.

Limitation

This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

Reference

This symbol indicates a reference.

[ ]

Keys that appear on the machine's display.

Keys and buttons that appear on the computer's display.

[ ]

Keys built into the machine's control panel.

Keys on the computer's keyboard.

Paper and Other Media Supported by This Printer

This section describes the paper size, feed direction, and the maximum amount of paper that can be loaded into each paper tray in this printer.

Note

❒ The following symbols and terminology are used to represent the feed direction.

In this manual	On the display	Paper feed direction
↑ (Feed direction)	A4 (210 x 297) 8 1/2 x 11	Short-edge feed direction

❒ Be careful of the paper feed direction. The direction is determined for each paper size.

❖ Input Paper Sizes (Metric version)

	Feed direction	Size (mm)	Bypass Tray	Tray 1	Paper Feed Unit (Tray 2/3)
A4		210 × 297	☆	◎	◎
B5		182 × 257	☆	◎	◎
A5		148 × 210	☆	×	×
A6		105 × 148	☆	×	×
Legal (LG, $8^1/_2 \times 14$ inches)		216 × 356	☆	◎	◎
Letter (LT, $8^1/_2 \times 11$ inches)		216 × 279	☆	◎	◎
$5^1/_2 \times 8^1/_2$ inches		140 × 216	☆	×	×
Executive (Exec., $7^1/_4 \times 10^1/_2$ inches)		184 × 276	☆	×	×
Folio ($8^1/_4 \times 13$ inches)		210 × 330	☆	×	×
Foolscap (F4, $8^1/_2 \times 13$ inches)		216 × 330	☆	×	×
F/GL (8 × 13 inches)		203 × 330	☆	×	×
Com#10 Env ($4\ ^1/_8 \times 9\ ^1/_2$ inches)		104.8 × 241.3	☆	×	×
C5 Env (6.38 × 9.02 inches)		162 × 229	☆	×	×

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	Feed direction	Size (mm)	Bypass Tray	Tray 1	Paper Feed Unit (Tray 2/3)
C6 Env (4.49 × 6.38 inches)	⊡	114 × 162	☆	×	×
DL Env (4.33 × 8.66 inches)	⊡	110 × 220	☆	×	×
Monarch Env (3 $^{7}/_{8}$ × 7 $^{1}/_{2}$ inches)	⊡	98.4 × 190.5	☆	×	×
Custom Size	-	-	★	×	×
16K (7.68 × 10$^{1}/_{2}$ inches)	⊡	195 × 267	☆	×	×

- ◎
  The size is supported and the printer selects it automatically.
- ☆
  The size is supported, but it should be selected using the control panel.
- ★
  The size is supported, but it should be set as a custom size using the control panel.
  The supported size may differ depending on the printer language you use. Set as a custom size setting using the control panel.
  The following sizes are supported:
  - Bypass Tray: approximately 90 - 216 mm in width, and 148 - 356 mm in length.
- ×
  The size is not supported.

❖ Input Paper Sizes (Inch version)

	Feed direction	Size (inch)	Bypass Tray	Tray 1	Paper Feed Unit (Tray 2/3)
A4	⊡	8.26” × 11.69”	☆	◎	◎
B5	⊡	7.17” × 10.12”	☆	◎	◎

	Feed direction	Size (inch)	Bypass Tray	Tray 1	Paper Feed Unit (Tray 2/3)
A5	▯	5.83” × 8.26”	☆	×	×
A6	▯	4.13” × 5.63”	☆	×	×
Legal (LG)	▯	8 1/2” × 14”	☆	◎	◎
Letter (LT)	▯	8 1/2” × 11”	☆	◎	◎
5 1/2 × 8 1/2 inches	▯	5 1/2” × 8 1/2”	☆	×	×
Executive (Exec.)	▯	7 1/4” × 10 1/2”	☆	×	×
Folio	▯	8 1/4” × 13”	☆	×	×
Foolscap F4	▯	8 1/2” × 13”	☆	×	×
F/GL	▯	8” × 13”	☆	×	×
Com#10 Env	▯	4 1/8” × 9 1/2”	☆	×	×
C5 Env	▯	6.38” × 9.02”	☆	×	×
C6 Env	▯	4.49” × 6.38”	☆	×	×
DL Env	▯	4.33” × 8.66”	☆	×	×
Monarch Env	▯	3 7/8” × 7 1/2”	☆	×	×
Custom Size	-	-	★	×	×
16K	▯	7.68” × 10 1/2”	☆	×	×

- ◎
  The size is supported and the printer selects it automatically.
- ☆
  The size is supported, but it should be selected using the control panel.
- ★
  The size is supported, but it should be set as a custom size using the control panel.
  The supported size may differ depending on the printer language you use. Set as a custom size setting using the control panel.
  The following sizes are supported:
  - Bypass Tray: approximately 3.55 - 8.50 inches in width, and 5.83 - 14.01 inches in length.
- ×

The size is not supported.

❖ Paper weight and number of sheets to be set

	Supported paper weight	Maximum number of sheets (plain paper)
Tray 1 Paper Feed Unit (Tray 2, Tray 3)	60.2 - 104.7 g/m^2 (16 - 28 lb.)	530 (80 g/m^2, 20 lb.)
Bypass Tray	60.2 - 199 g/m^2 (16 - 53 lb.)	100 (80 g/m^2, 20 lb.)

Check that the top of the stack is not higher than the limit mark inside the tray.

Paper Recommendations

Loading Paper

Important

- ❒ Do not use ink-jet printer paper because it may stick to the fusing unit and cause a paper misfeed.
- ❒ Set the paper as described below
  - Tray 1, Paper Feed Unit (Tray 2, Tray 3): Print side facing up
  - Bypass Tray: Print side facing down
- ❒ Print quality cannot be guaranteed if paper other than the ones recommended is used. For more information about recommended paper, contact your sales or service representative.
- ❒ Do not use paper that has already been printed onto by other printers.

Storing Paper

- Paper should always be stored properly. Improperly stored paper might result in poor print quality, paper misfeeds, or printer damage. Recommendations are as follows:
  - Avoid storing paper in humid areas.
  - Avoid exposing paper to direct sunlight.
  - Store on a flat surface.
- Keep paper in the package in which the paper came.

Types of Paper and Other Media

Plain Paper

Paper thickness	60.2 - 104.7 g/m^2 (16 - 28 lb.) • **[Thin]**: 60.2 - 90.2 g/m^2 (16 - 24 lb.) • **[Normal]**: 90.2 - 104.7 g/m^2 (24 - 28 lb.)
Printer setup	Make the following two settings using the control panel: • Press **[Paper Input]** menu, **[Paper Type]**, and then **[Plain Paper]**. • Press **[Maintenance]** menu, and then **[Thin]** or **[Normal]**.
Printer driver setup	Click **[Plain]** or **[Plain & Recycled]** in the **[Type:]** list.
Enabled paper feeding tray	Any input tray can be used.

Number of sheets that can be set	• Tray 1: 530 • Tray 2, Tray 3 (Paper Feed Unit Type 3000): 530 • Bypass Tray: 100 Note ❒ Make sure paper is not stacked higher than the upper limit mark (▼) inside the tray. Make sure paper is not stacked higher than the paper guides inside the bypass tray.
Both-side printing	Possible

Thick Paper

Paper thickness	105 - 199 g/m^2 (28 - 53 lb.) • **[Thick Paper 1]**: 105 - 165 g/m^2 (28 - 44 lb.) • **[Thick Paper 2]**: 165 - 199 g/m^2 (44 - 53 lb.)
Printer setup	Press **[Paper Input]** menu, **[Paper Type]** and then **[Thick Paper 1]** or **[Thick Paper 2]** on the control panel.
Printer driver setup	Click **[Thick1]** or **[Thick2]** in the **[Type:]** list.
Enabled paper feeding tray	Bypass Tray • **[Thick Paper 1]**: 30 • **[Thick Paper 2]**: 10 Note ❒ Make sure paper is not stacked higher than the paper guides inside the bypass tray.
Both-side printing	Not possible
Additional cautions	• Print speed is slightly slower than when using plain paper.

Adhesive labels

Printer setup	Press **[Paper Input]** menu, **[Paper Type]**, and then **[Labels]** on the control panel.
Printer driver setup	Click **[Labels]** in the **[Type:]** list.
Enabled paper feeding tray	Bypass Tray: 50 Note ❒ Make sure paper is not stacked higher than the paper guides inside the bypass tray.
Both-sided printing	Not possible
Additional cautions	Print speed is slightly slower compared to plain paper.

OHP transparencies

Printer setup	Press **[Paper Input]** menu, **[Paper Type]**, and then **[Transparency]** on the control panel.

Printer driver setup	Click **[Transparency]** in the **[Type:]** list.
Enabled paper feeding tray	Bypass Tray
Number of sheets that can be set	Bypass Tray: 50 Note ❒ Make sure paper is not stacked higher than the paper guides inside the bypass tray.
Both-sided printing	Not possible
Additional cautions	• Print speed for OHP transparencies is slower than for plain paper. • Due to switching modes, the machine will be on standby for thirty or forty seconds after the job was received. • We recommend that you use a 4000 ANSI lumen or brighter overhead projector to project OHP transparencies.

Glossy Paper

Printer setup	Press **[Paper Input]** menu, **[Paper Type]**, and then **[Glossy Paper]** on the control panel.
Printer driver setup	Click **[Glossy]** in the **[Type:]** list.
Enabled paper feeding tray	Bypass Tray: 50 Note ❒ Make sure paper is not stacked higher than the paper guides inside the bypass tray.
Both-sided printing	Not possible
Additional cautions	Print speed is slightly slower compared to plain paper.

Envelopes

Printer setup	Press **[Paper Input]** menu, **[Paper Type]**, and then **[Thick Paper 1]** or **[Thick Paper 2]** on the control panel.
Printer driver setup	Click **[Thick1]** or **[Thick2]**in the **[Type:]** list.
Enabled paper feeding tray	Bypass Tray: 10 Note ❒ Make sure paper is not stacked higher than the paper guides inside the bypass tray.
Both-sided printing	Not possible

Additional cautions	• Check the print side is facing down. • Check there is no air in the envelopes before loading. • For better print quality, we recommend the right, left, top, and bottom print margins to be at least 15 mm 0.6 inch. • Load only one size and type of envelope at a time. • Before loading envelopes, flatten their leading edges (the edge going into the printer) by running a pencil or ruler across them. • Some kinds of envelope might cause misfeeds, wrinkles or print poorly. • Print quality on envelopes may be uneven if parts of an envelope have differing thicknesses. Print one or two envelopes to check print quality. • Use flat envelopes with no curl. If they have a curl, flatten them. • Use completely flat envelopes that contain no air inside. • Do not print on both sides of envelopes.

Paper not supported by this printer

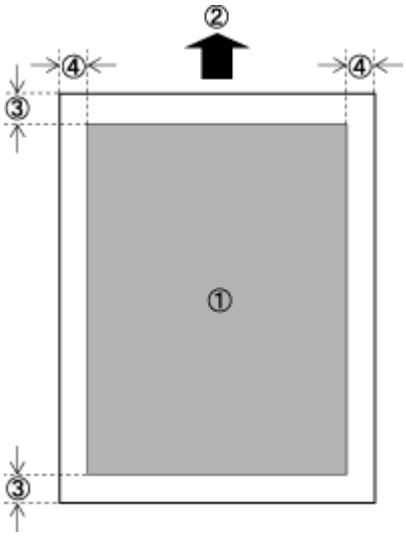
Avoid using the following paper as they are not supported by this printer.

- Paper meant for an ink-jet printer
- Bent, folded, or creased paper
- Curled or twisted paper
- Torn paper
- Wrinkled paper
- Damp paper
- Paper that is dry enough to emit static electricity
- Paper that has already been printed onto, except a preprinted letterhead. Malfunctions are especially likely when using paper printed on by other than a laser printer (e.g. monochrome and color copiers, ink-jet printers, etc.)
- Special paper, such as thermal paper, aluminum foil, carbon paper and conductive paper
- Paper whose weight is heavier or lighter than the limitation
- Paper with windows, holes, perforations, cutouts, or embossing
- Adhesive label paper on which glue or base paper is exposed
- Paper with clips or staples
- Do not use the following envelopes:
  - Envelopes with multiple flaps
  - Envelopes with a peel-off adhesive strip
  - Envelopes with windows or clasps

Print Area

The following shows the print area for this printer. Be sure to set the print margins correctly by the application.

❖ Paper

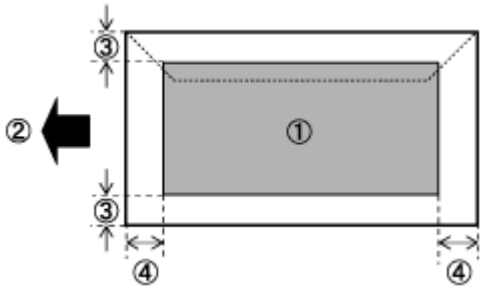


① Print area
② Feed direction
③ Approx. 5 mm (0.2 inches)
④ Approx. 5 mm (0.2 inches)

Note

❒ The print area may vary depending on the paper size, printer language and printer driver settings.

❖ Envelope



① Print area
② Feed direction

③ Approx. 5 mm (0.2 inches)

④ Approx. 5 mm (0.2 inches)

Note

❒ The print area may vary depending on the paper size, printer language and printer driver settings.

Loading Paper

This describes how to load paper into the paper tray and bypass tray.

⚠CAUTION

- *Do not pull out the paper tray forcefully. If you do, the tray might fall and cause an injury.*

Loading Paper in Tray 1 and the optional paper feed unit

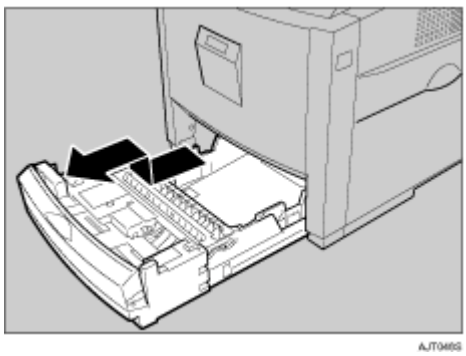
The following example explains loading procedure for the standard paper tray (Tray 1). The same procedure can be used for the optional paper feed unit.

Important

❒ Make sure paper is not stacked above the limit mark inside the tray. Misfeeds might occur.

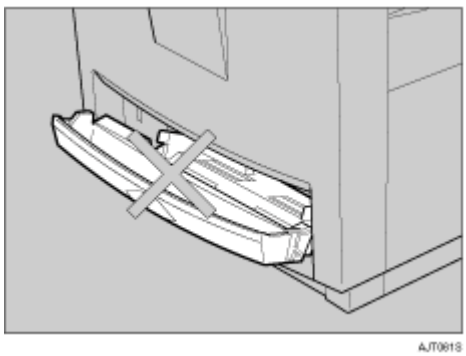
❒ Do not put different types of paper in a single paper tray.

1 Pull the paper tray out of the printer until it stops. Lift it slightly, and then pull it fully out. Place the paper tray on a flat surface.

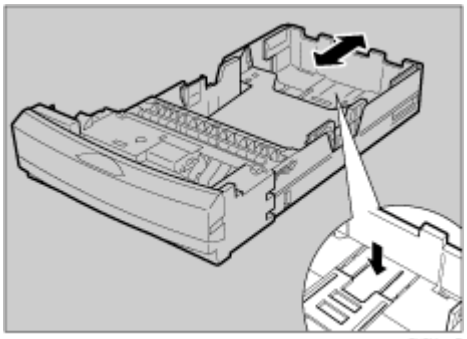


Note

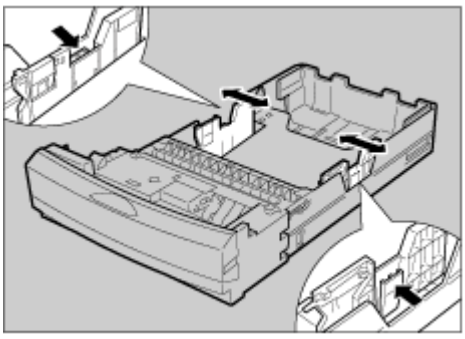
❒ You can not pull out Tray 1 if the bypass tray is open.



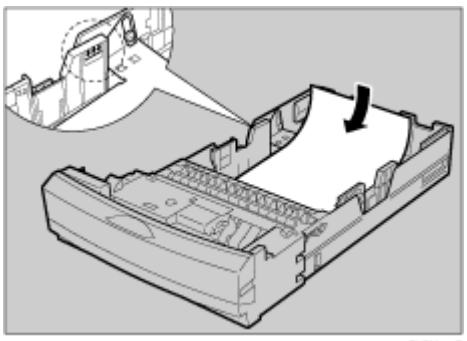
2 **Press “Push”, and then adjust the rear guide to the paper size you want to load.**



3 **Adjust the side guides to the paper size you want to load.**



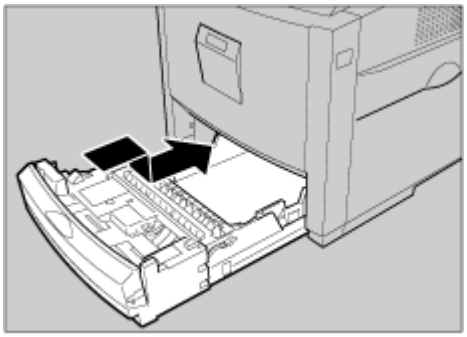
4 **Load paper print side up in the paper tray.**



Important

- ❒ Make sure the top of the stack is not higher than the limit mark inside the tray.
- ❒ To avoid misfeeds, set the side guides to the exact paper size.
- ❒ Do not load different kinds of paper in the tray.

5 **Slide the paper tray fully into the printer.**

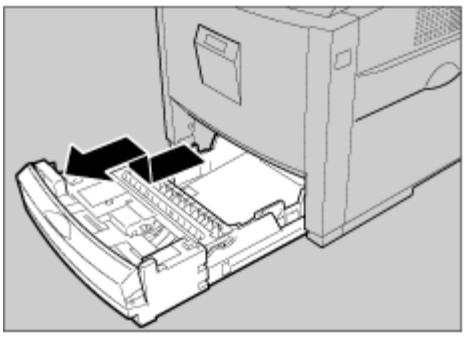


Important

❒ Misfeeds can occur if the paper tray is not fully inserted. Make sure it is fully inserted.

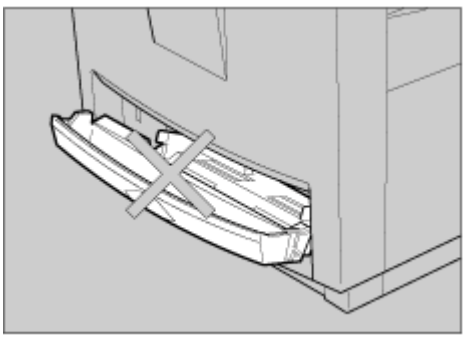
Changing paper size of the paper tray

1 **Pull the paper tray out of the printer until it stops. Lift it slightly, and then pull it fully out. Place the paper tray on a flat surface.**

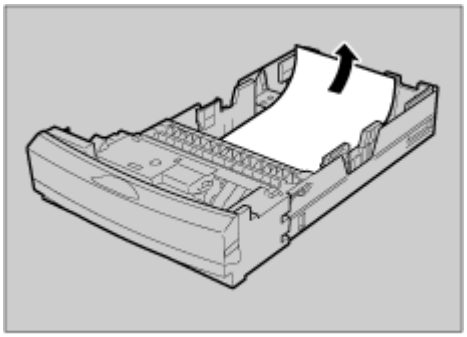


Note

❒ You can not pull out Tray 1 if the bypass tray is open.

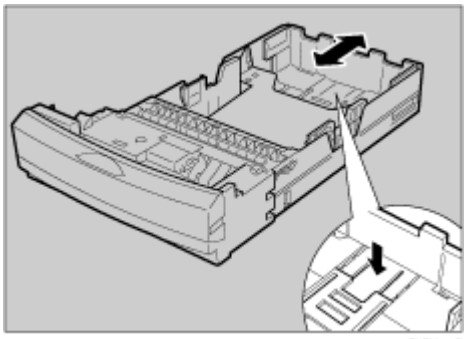


2 **Remove the paper.**



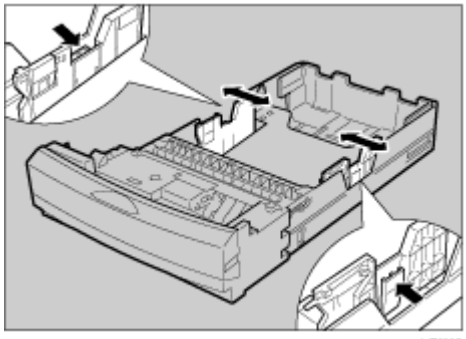
ZHBY030E

3 **Press “Push”, and then adjust the rear guide to the paper size you are using.**



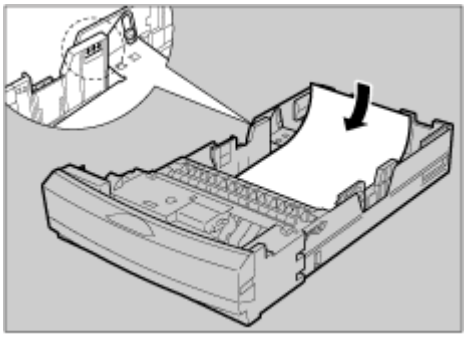
ZHBY040E

4 **Adjust the side guides to the paper size you want to load.**



AJT060S

5 **Load paper print side up in the paper tray.**

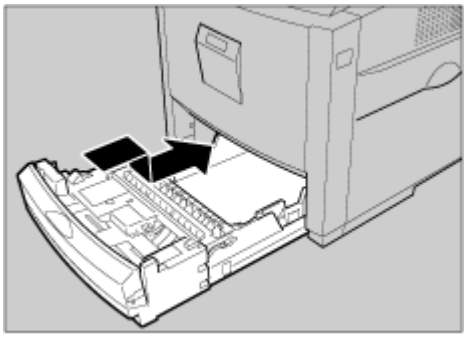


ZHBY020E

Important

❒ Check the top of the stack is not higher than the limit mark inside the tray.

6 **Slide the paper tray fully into the printer.**



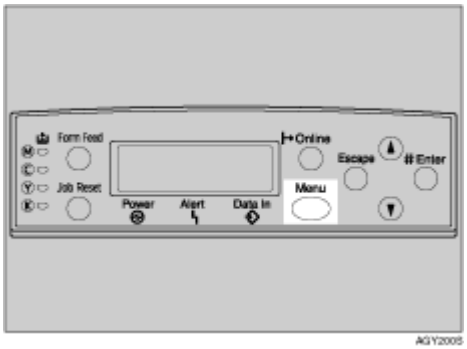
AJT084S

Specifying a paper type for Tray 1 and the optional paper feed unit

Improve printer performance by selecting the optimum paper type for the tray. You can select from the following paper types:

- Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Pre-printed

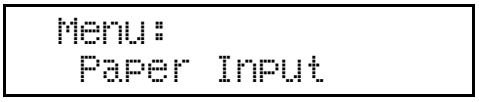
1 **Press the【Menu】key.**



AGY200S

The **[Menu]** screen appears.

2 Press the 【▲】 or 【▼】 key to display [Paper Input], and then press the 【# Enter】 key.



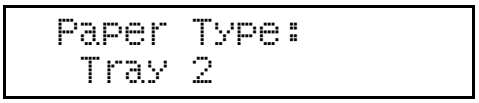
The paper type selection menu appears.

3 Press the 【▲】 or 【▼】 key to display [Paper Type], and then press the 【# Enter】 key.

The paper tray selection menu appears.

4 Press the 【▲】 or 【▼】 key to display the target paper tray, and then press the 【# Enter】 key.

When the optional paper feed units are installed in the printer, **[Tray 2]** and **[Tray 3]** appears (depending on how many units are installed).



The paper type selection menu appears.

5 Press the 【▲】 or 【▼】 key to display the target paper tray, and then press the 【# Enter】 key.

After about two seconds, the display returns to the menu.

6 Press the 【Online】 key.

The initial screen appears.

The following message appears on the display:

Note

❒ When selecting Plain Paper, select **[Thin]** or **[Normal]** for **[Plain Paper]** in the **[Maintenance]** menu.

Loading Paper in the Bypass Tray

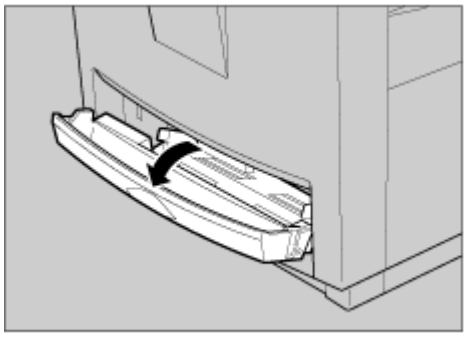
Specifying standard size paper for the Bypass Tray

This section explains how to load standard size paper into the bypass tray.

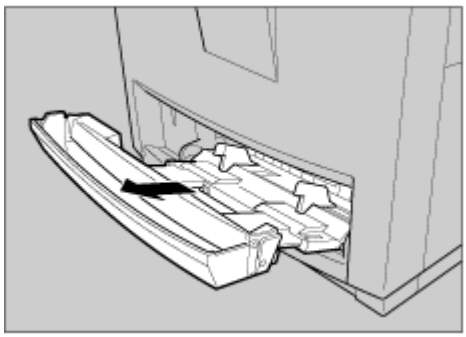
Important

- ❒ To avoid multi-sheet feeds, fan the paper before loading it onto the paper tray.
- ❒ Set the size and direction of the loaded paper using the control panel or the printer driver. Make sure the settings do not conflict. Conflicting settings can cause paper jams or loss of print quality.
- ❒ Load paper print side down and in the short-edge feed direction.

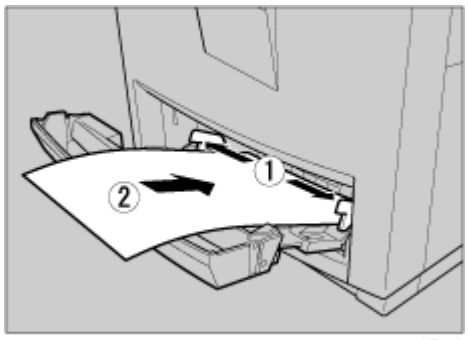
1 **Open the bypass tray.**



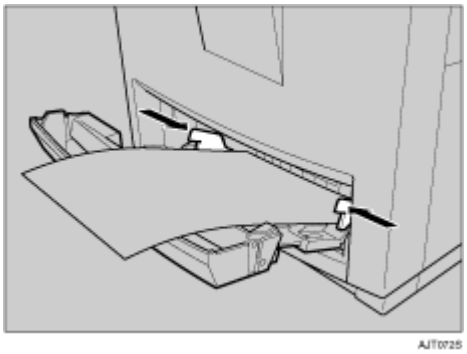
2 **Extend the bypass tray.**



3 **Slide the side guides outward (①), and then insert paper print side down until it stops (②).**



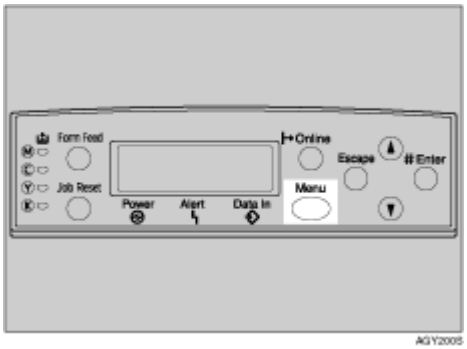
4 **Adjust the side guides to the paper width.**



Important

- ❒ Check the top of the stack is not higher than the limit mark inside the tray.
- ❒ To avoid multi-sheet feeds, fan the paper before loading it onto the paper tray.

5 **Set the paper size using the control panel. Press the [Menu] key.**



The **[Menu]**screen appears.

6 **Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.**

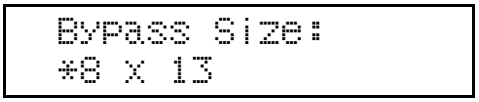
```
Menu:
  Paper Input
```

The paper selection menu appears.

7 **Check that [Bypass Size] appears, and then press the [# Enter] key**

The paper size selection menu appears.

8 Press the [▲] or [▼] key to display the size and orientation of the paper in the bypass tray.



After about two seconds, the display returns to the menu.

9 Press the [Online] key.

The initial screen appears.

Note

❒ To load thick paper, OHP transparencies, or envelopes, make settings for thick paper or OHP transparencies using the control panel and printer driver.

❒ The number of pages that can be loaded in the bypass tray differs depending on paper type. Make sure paper is not stacked above the paper guides inside the bypass tray.

Reference

For details about control panel settings for custom size paper or special paper, see p.23 “Specifying custom size paper for the Bypass Tray”.

To select custom size paper (148 - 356 mm in length, 90 - 216 mm in width), see p.23 “Specifying custom size paper for the Bypass Tray”.

For control panel settings when using thick paper, OHP transparencies, or post cards, see p.25 “Specifying a paper type for the Bypass Tray”.

Specifying custom size paper for the Bypass Tray

Important

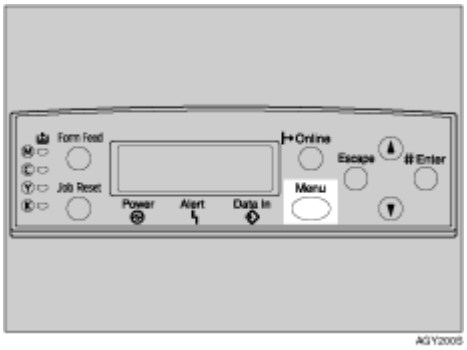
❒ When loading custom size or special paper, specify the paper size using the control panel and printer driver.

❒ Paper sizes between 148 - 356 in length and 90 - 216 mm in width can be loaded in the bypass tray.

❒ The custom paper size selected using the printer driver overrides that selected using the control panel. Do not configure settings using the control panel if you have already made settings using the printer driver. However, when printing with a printer driver other than the RPCS printer driver, you must configure the settings using the control panel.

❒ You cannot print on custom size paper with an application that does not support the custom size setting.

1 Press the 【Menu】 key.



The **[Menu]**screen appears.

2 Press the 【▲】 or 【▼】 key to display [Paper Input], and then press the 【# Enter】 key.

```
Menu:
 Paper Input
```

The paper selection menu appears.

3 Check [Bypass Size] appears, and then press the 【# Enter】 key.

The paper size selection menu appears.

4 Press the 【▲】 or 【▼】 key to display [Custom Size], and then press the 【# Enter】 key.

5 Press the 【▲】 or 【▼】 key to set the horizontal value, and then press the 【# Enter】 key.

```
Custom Size:
Horiz.   8.50"
```

By pressing the key, the value increases or decreases by 0.01 inch. By pressing and holding the key, the value varies by 1 inch.

6 Press the 【▲】 or 【▼】 key to set the vertical value, and then press the 【# Enter】 key.

```
Custom Size:
Vert.    11.00"
```

After about two seconds, the display returns to the menu.

7 Press the 【Online】 key.

The initial screen appears.

Reference

For details about the printer driver, see the printer driver Help.

Specifying a paper type for the Bypass Tray

By selecting the paper type you want to load, the printer performs better. You can select from the following paper types:

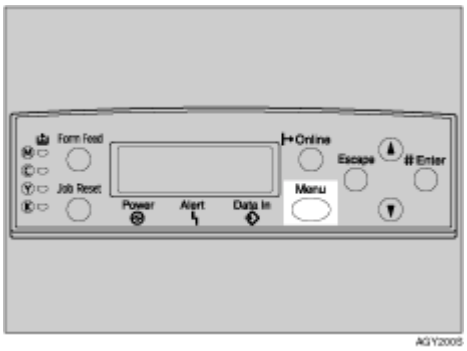
- Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Pre-printed, Labels (adhesive label paper) , Bond Paper, Cardstock, Transparency (OHP transparency), Thick Paper 1, Thick Paper 2, Glossy Paper

Important

❒ Be sure to select the paper type when you load labels, thick paper, or OHP transparencies in the bypass tray.

❒ The paper type selected using the printer driver overrides that selected using the control panel.

1 Press the 【Menu】 key.



The **[Menu]**screen appears.

2 Press the 【▲】 or 【▼】 key to display [Paper Input], and then press the 【# Enter】 key.

```
Menu:
 Paper Input
```

The paper selection menu appears.

3 Press the 【▲】 or 【▼】 key to display [Paper Type], and then press the 【# Enter】 key.

The paper tray selection menu appears.

4 Press the 【▲】 or 【▼】 key to display [Bypass Tray], and then press the 【# Enter】 key.

The paper type selection menu appears.

5 **Press the [▲] or [▼] key to display the loaded paper type, and then press the [# Enter] key.**

```
Bypass Tray:
 Recycled Paper
```

After about two seconds, the display returns to the menu.

6 **Press the [Online] key.**

The initial screen appears.

The following message appears on the display:

Note

❒ When selecting Plain Paper, select **[Thin]** or **[Normal]** for **[Plain Paper]** in the **[Maintenance]** menu.

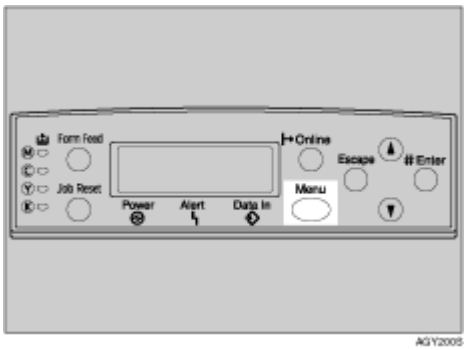
❒ The following paper types cannot be printed on both sides:

- Special Paper, Labels (adhesive label paper), Cardstock, Transparency (OHP transparency), Thick Paper 2 (165 - 199 g/m^2), Thin Paper, Plain:Dup.Back (reverse side of plain paper), Thick1:Dup.Back (reverse side of thick paper)

Switching between Paper Trays

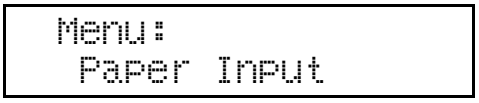
When paper of the same size is loaded in both the standard tray and the paper feed unit (option), and when **[Auto Tray Select]** is set with the printer driver, paper will be fed from the standard tray when you start printing. To print on paper loaded in the paper feed unit, switch the tray to be used to the paper feed unit using **[Tray Priority]** in the **[Paper Input]** menu.

1 **Press the [Menu] key.**



The **[Menu]**screen appears.

2 Press the 【▲】 or 【▼】 key to display [Paper Input], and then press the 【# Enter】 key.



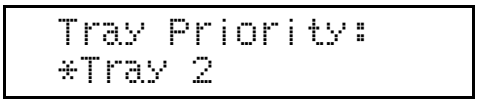
The paper selection menu appears.

3 Press the 【▲】 or 【▼】 key to display [Tray Priority], and then press the 【# Enter】 key.

The paper tray selection menu appears.

4 Press the 【▲】 or 【▼】 key to select the tray type you want to use, and then press the 【# Enter】 key.

The following message appears on the display:



5 Press the 【Online】 key.

The initial screen appears.

Replacing the Toner Cartridge

⚠WARNING

- ***Do not incinerate spilled toner or used toner. Toner dust is flammable and might ignite when exposed to an open flame.***
- ***Disposal should take place at an authorized dealer or an appropriate collection site.***
- ***If you dispose of the used toner cartridges yourself, dispose of them according to local regulations.***
- ***Do not store toner, used toner, or toner containers in a place with an open flame. The toner might ignite and cause burns or a fire.***

⚠CAUTION

- *Keep toner (used or unused) and the toner cartridge out of reach of children.*
- *If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.*
- *If your skin comes into contact with toner or used toner, wash the affected area thoroughly with soap and water.*
- *If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.*

⚠CAUTION

- *If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.*
- *Avoid getting toner on your clothes or skin when removing a paper jam or replacing toner. If your skin comes into contact with toner, wash the affected area thoroughly with soap and water.*
- *If toner gets on your clothing, wash with cold water. Hot water will set the toner into the fabric and may make removing the stain impossible.*

Note

❒ When handling toner cartridges, never stand them up on either end or position them upside down.

❒ Store toner cartridges in a cool dark place.

❒ Actual printable numbers vary depending on image volume and density, number of pages printed at a time, paper type and size, and environmental conditions such as temperature and humidity. Toner quality degrades over time. You may have to replace the toner cartridge prematurely. We recommend you prepare a new toner cartridge beforehand.

The color of the lit LED indicates the toner status for each color. A red light indicates the toner cartridge must be replaced.

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Replace the toner cartridge if the following message appears on the display:

```
Add Toner
XXX/XXX
```

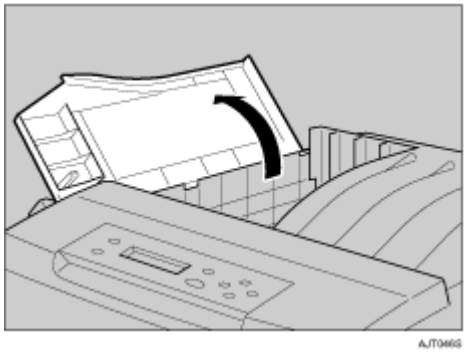
Note

❒ A combination of one to four colors, yellow, magenta, cyan, black, appears in "XXX".

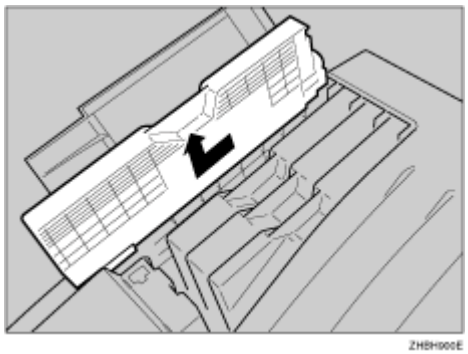
❒ If cyan, magenta, or yellow toner runs out, you can print in black and white using black toner. Change the color mode setting to "Black and White" using the printer driver.

❒ If black toner runs out, you cannot print in black and white or color until the black toner cartridge is replaced.

1 Open the upper left cover of the printer.



2 Remove the toner cartridge you want to replace.



Important

❒ Do not shake the removed toner cartridge. Remaining toner may leak.

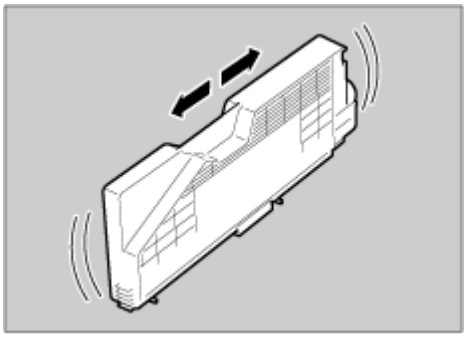
Note

❒ All four cartridges are removed using the same procedure.

❒ The illustration uses the yellow cartridge as an example.

3 Take a new toner cartridge out of its package.

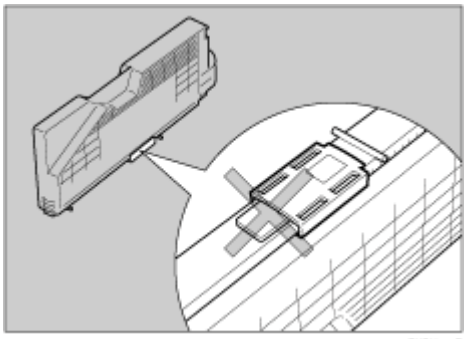
4 **Shake the toner cartridge from side to side about 10 times.**



ZHBH480E

Important

❒ Do not open the shutter at the bottom of the toner cartridge. Toner may leak.

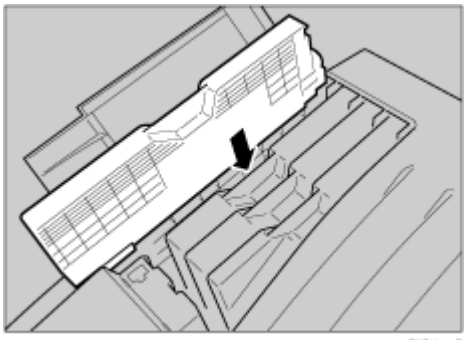


ZHBH470E

Note

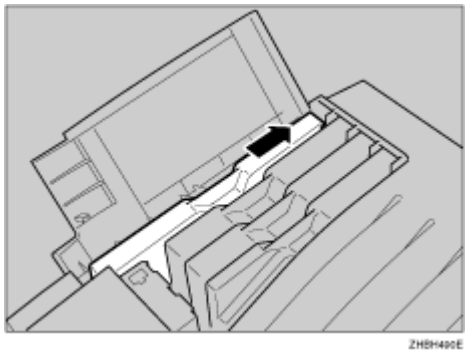
❒ The illustration uses the black cartridge as an example.

5 **Check the toner color and location correspond, and carefully insert the toner cartridge vertically.**



ZHBH480E

6 Insert the toner cartridge in the direction of the arrow.



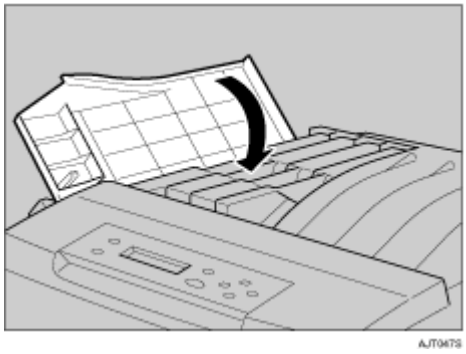
Important

❒ Do not install and remove toner cartridges unless necessary. Excessive handling results in toner leakage.

Note

❒ All four cartridges are installed using the same procedure.

7 Close the printer's upper left cover.



Note

❒ If the toner cartridge is not properly installed, you cannot close the printer's upper left cover.

Replacing the Waste Toner Bottle

⚠WARNING

- ***Do not incinerate spilled toner or used toner. Toner dust is flammable and might ignite when exposed to an open flame. Disposal should take place at an authorized dealer or an appropriate collection site. If you dispose of the used toner containers yourself, dispose of them according to local regulations.***

⚠CAUTION

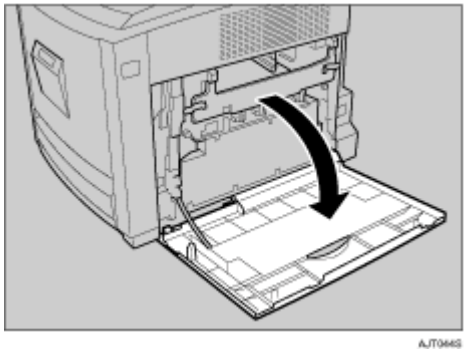
- *Keep toner (used or unused) and the toner cartridge out of reach of children.*
- *Do not put an object on the right cover when it is open.*

Replace the waste toner bottle when the following message appears on the display:

```
Replace Used
Toner Bottle
```

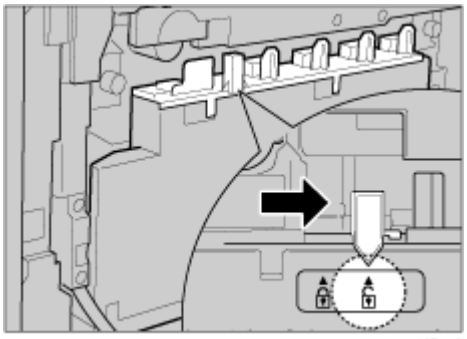
1 Turn off the power, and then unplug the power cable.

2 Open the right cover.



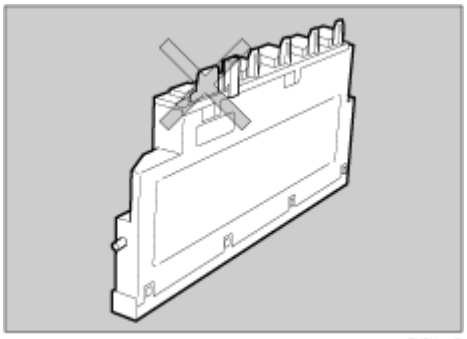
3 Take a new waste toner bottle out of its the bag.

4 **Unlock the waste toner bottle by sliding the green arrow to the position shown.**

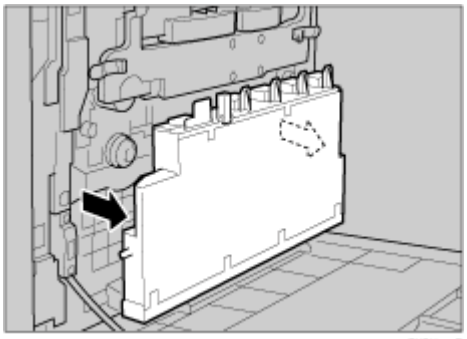


Important

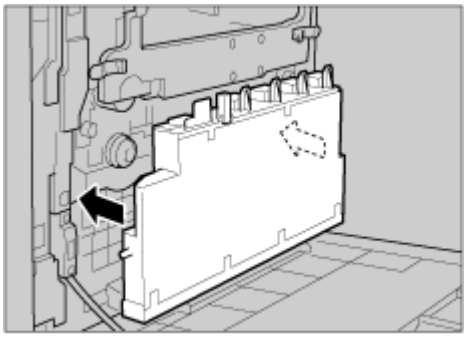
❒ Do not lock the removed waste toner bottle. Toner may leak.



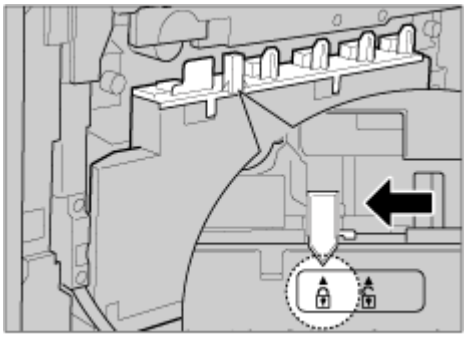
5 **Remove the used waste toner bottle carefully.**



6 **Place the new waste toner bottle in the position shown in the illustration.**



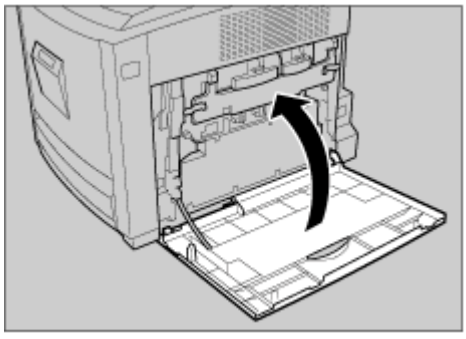
7 **Lock the waste toner bottle by sliding the green arrow to the position shown.**



Important

❒ Be sure to lock the waste toner bottle to prevent toner from leaking inside the printer.

8 **Close the right cover carefully.**



9 **Turn on the power.**

Replacing the Photo Conductor Unit

Replace the black photo conductor unit when the following message appears on the display:

```
Replace Black
PCU
```

Replace the three color photo conductor units when the following message appears on the display:

```
Replace Color
PCU
```

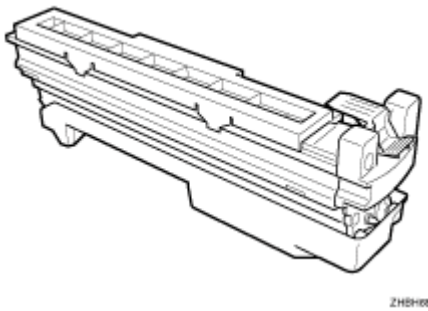
Color photo conductor units (yellow, cyan, and magenta) are supplied as a single item.

Important

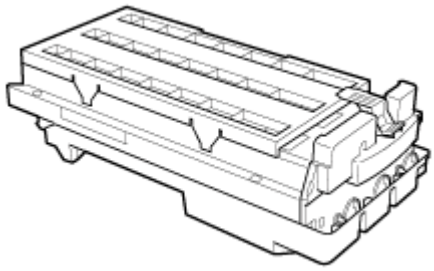
- ❒ Exposure to light reduces photo conductor unit performance. Replace the unit as quickly as possible.
- ❒ Do not pull out the photo conductor unit with force or haste, it may fall and you may damage the machine.
- ❒ Take care that nothing comes into contact with the surface of the photo conductor.

Check the contents of the box for the following items:

❖ **Photo Conductor Unit Black**



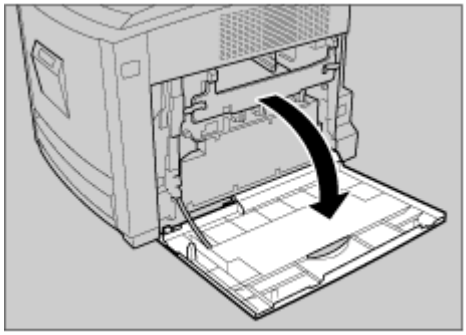
❖ Photo Conductor Unit Color



ZHBH600E

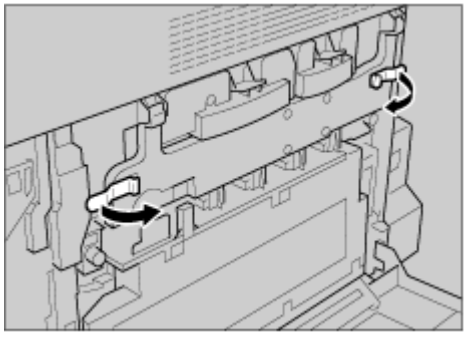
1 **Turn off the power, and then unplug the power cable.**

2 **Open the right cover.**



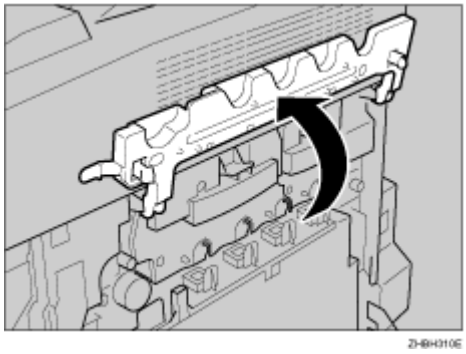
AJT044S

3 **Pull out the green levers on the left and right that are securing the inner cover.**



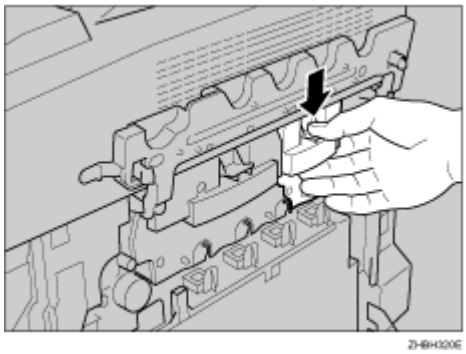
ZHBH300E

4 **Lift the inner cover until it stays up.**

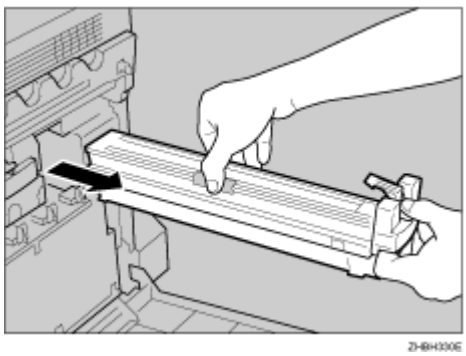


5 **Remove the photo conductor unit.**

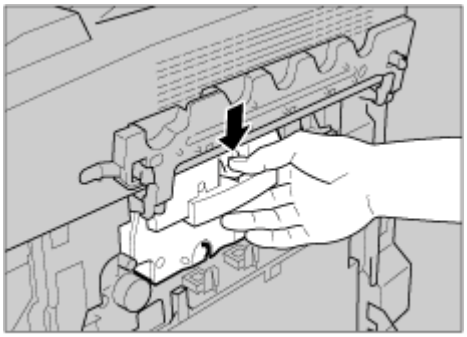
6 **Pinch the green lever to unlock the unit.**



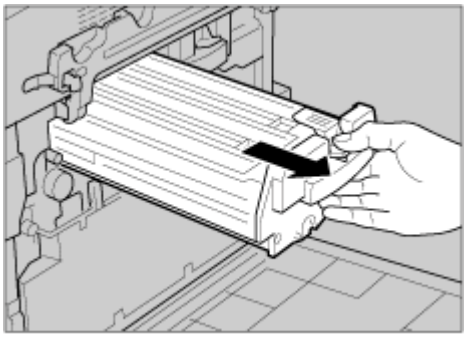
7 **Pull out the photo conductor unit carefully.**



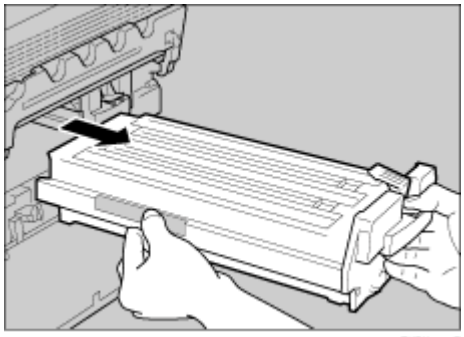
8 **Pinch the green lever to unlock the unit.**



9 **Pull out the photo conductor unit carefully until it stops.**



10 **Pinch the green part to release the unit.**



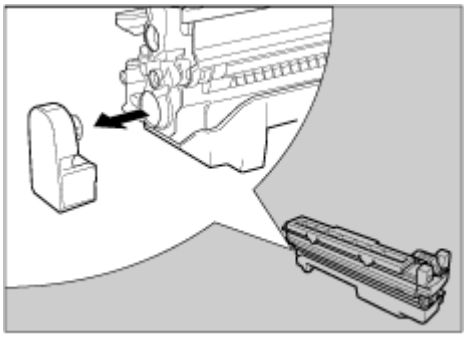
11 **Pull out the photo conductor unit carefully.**

Important

❒ Be sure to hold the unit with both hands, and pull it out carefully.

12 **Take out the new photo conductor unit.**

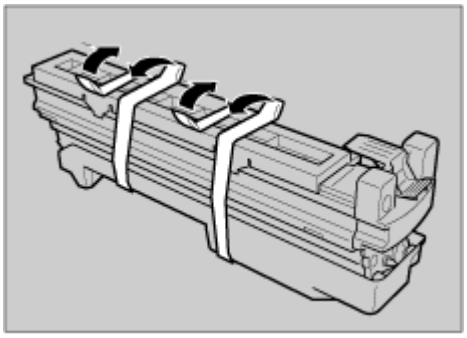
13 Remove the cap attached to the photo conductor unit.

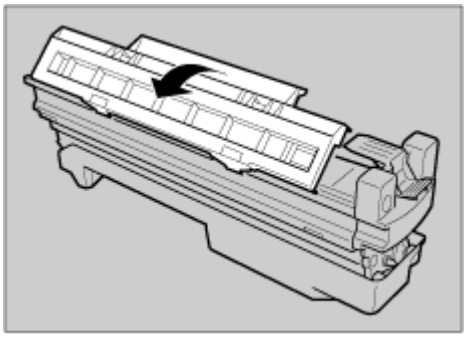


Note

❒ The cap is no longer needed and can be disposed of.

14 Remove the tape from around Photo Conductor Unit by peeling it downward, and then remove the unit's top cover.

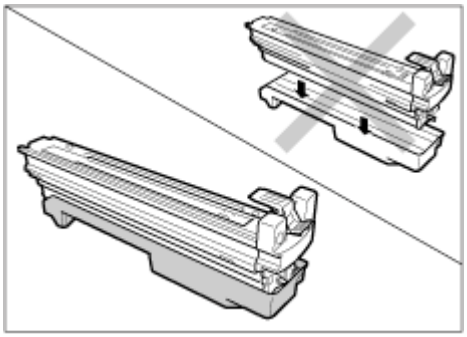




Important

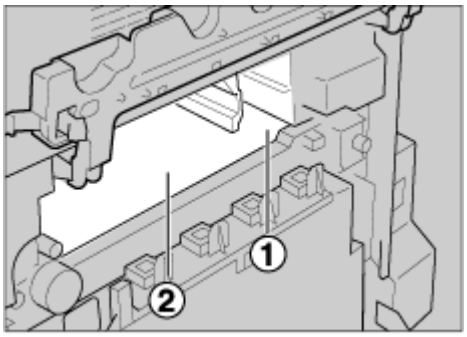
❒ Do not remove the cover attached to the bottom of the photo conductor unit yet.

❒ After you take the new Photo Conductor Unit out of the bag, quickly install it.



ZHBHA882E

15 Check the locations for each Photo Conductor Unit.



ZHBHA720E

① Photo Conductor Unit (Black)
② Photo Conductor Unit (Color)

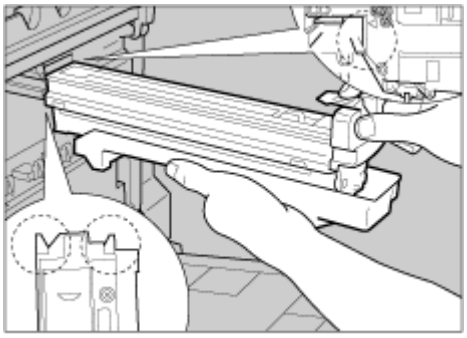
16 Align the green arrow at the tip of the photo conductor unit with the rail inside the printer.

Important

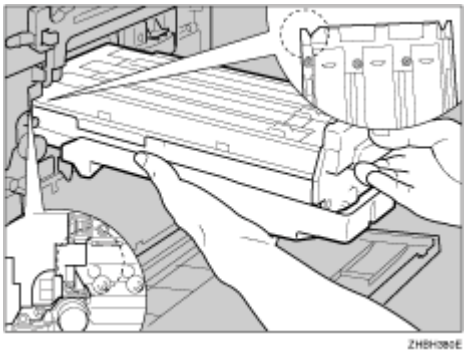
❒ Make sure the green arrow fits securely to the rail before proceeding to the next step.

❒ If you do not securely attach the green arrow of the photo conductor unit to the rail, you may damage the photo conductor unit.

❖ **Photo Conductor Unit Black**

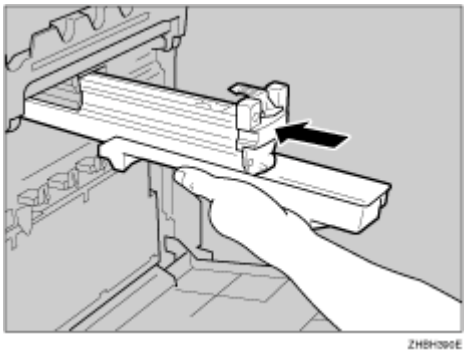


❖ **Photo Conductor Unit Color**

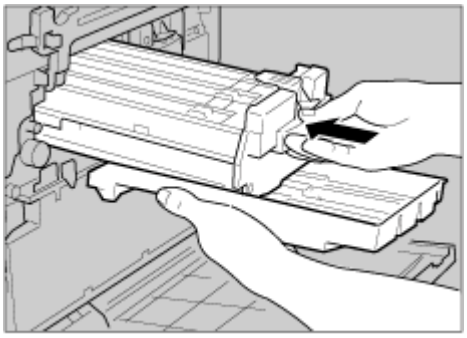


17 **Push the front of the photo conductor unit carefully in sliding the unit from its cover until it stops.**

❖ **Photo Conductor Unit Black**



❖ **Photo Conductor Unit Color**

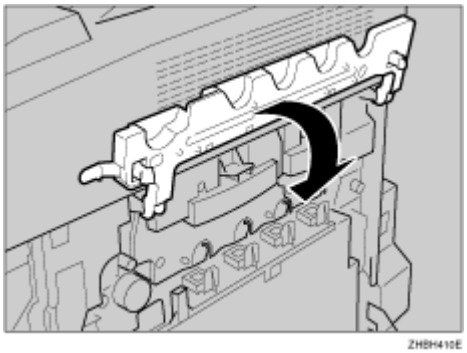


ZHBH400E

Important

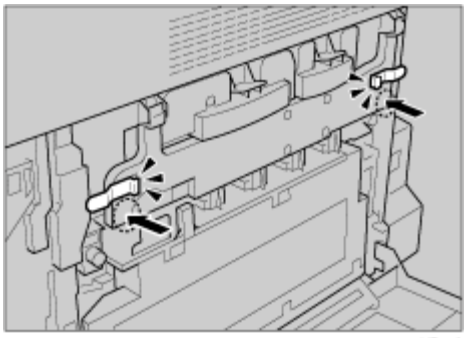
❒ If the photo conductor unit is not correctly installed, print quality will be lost. For example, certain colors may not print.

18 **Lower the inner cover slowly.**



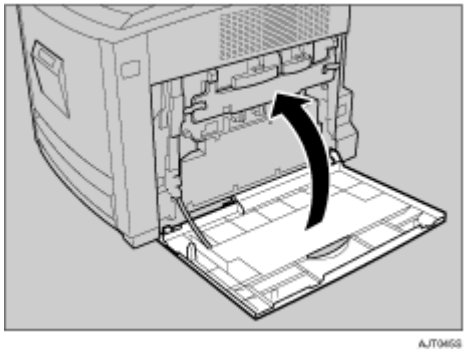
ZHBH410E

19 **Push the left and right edge of the inner cover to secure it.**



AJT085S

20 Close the right cover carefully.



21 Plug in the power cable, and then turn on the power.

The printer starts calibration. Wait until it stops. The following message appears on the display:

```
Calibrating...
```

Wait until **[Ready]** appears on the display panel.

Important

❒ Do not turn off the power during calibration. Doing so results in malfunction.

Replacing the Fusing Unit

⚠CAUTION

- *The inside of this machine gets very hot. Do not touch parts labelled "⚠"(hot surface). Touching "⚠" labelled parts (hot surface) could result in burns.*
- *The fusing unit gets very hot. When installing a new fusing unit, turn off the printer and wait about 30 minutes. Then you can install the new fusing unit. Handling the unit before it has fully cooled down (30 mins) could result in burns.*
- *Do not pull out the fusing unit forcefully. Doing so may cause the unit to fall and result in injury.*
- *Only the handle of the fusing unit is safe to touch. Touching other areas may result in burns.*

Replace the fusing unit when the following message appears on the display:

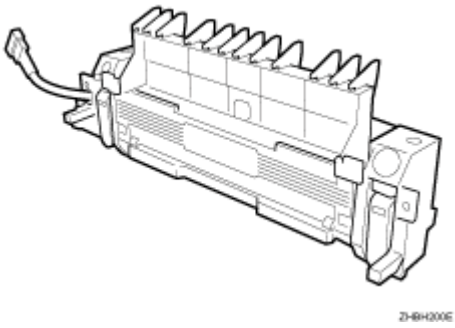
```
Replace Fusing
Unit soon
```

or

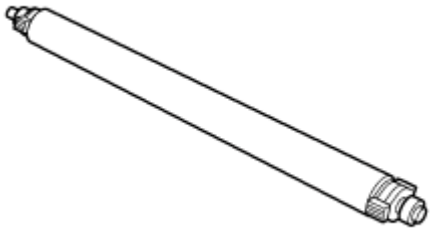
```
Replace
Fusing Unit
```

Check the contents of the box for the following items:

❖ **Fusing Unit**



❖ Transfer Roller



AJT077S

Important

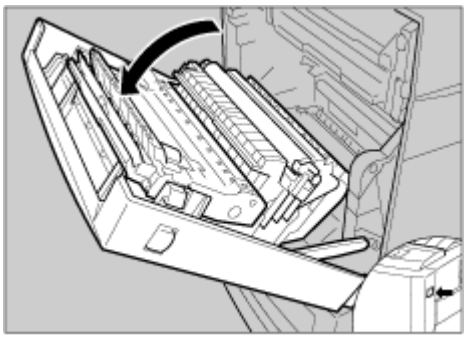
❒ Be sure to make the maintenance setting using the control panel after replacing the fusing unit. The procedure is complete only when the maintenance setting is made.

1 **Turn off the power, and then unplug the power cable.**

Important

❒ After power off, wait 30 minutes for the fusing unit to cool before handling it.

2 **Open the front cover by pushing the front cover release button.**

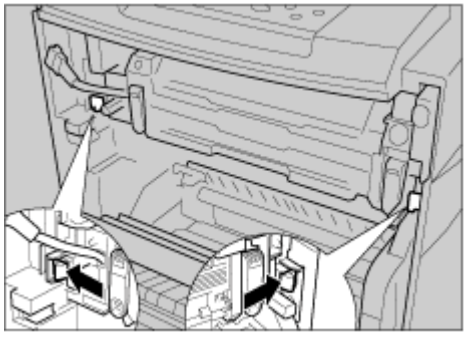


ZHBP281E

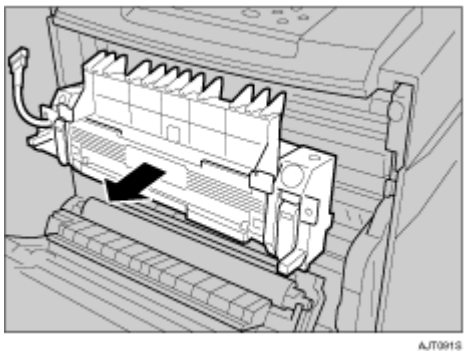
3 **Pinch the connector lever, and then pull out the connector.**

AJT089S

4 Push the green release buttons on the left and right outwards to unlock the fusing unit.

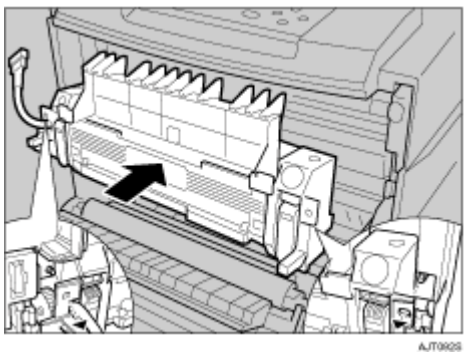


5 Remove the fusing unit carefully.

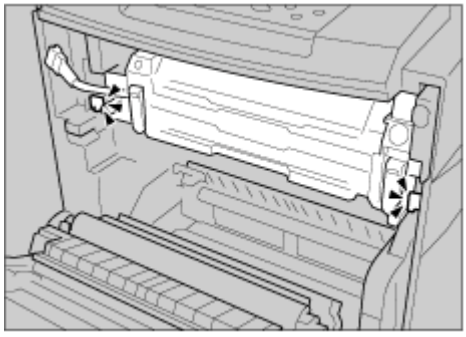


6 Take the new fusing unit from out from its box.

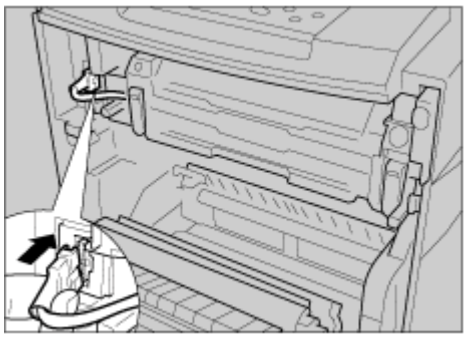
7 Place the unit as shown, and then carefully insert the new fusing unit.



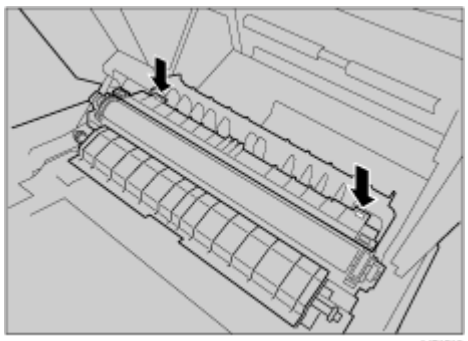
8 Carefully push in the fusing unit until it clicks into position, and then check that the unit is locked.



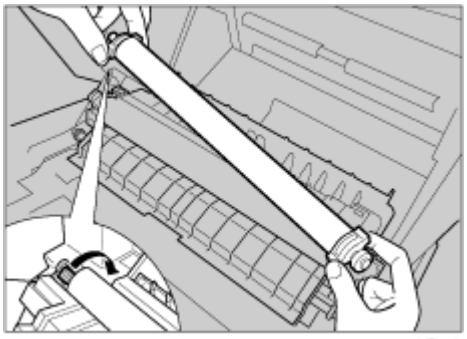
9 Push in the connector.



10 Open the transfer roller cover.



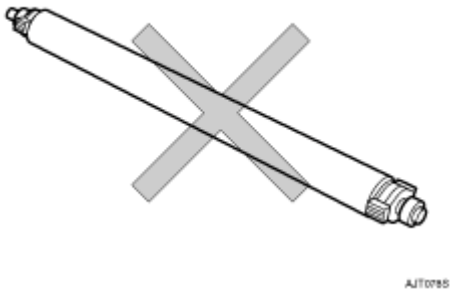
11 **Turn the green part in the direction of the arrow, and then remove the transfer roller.**



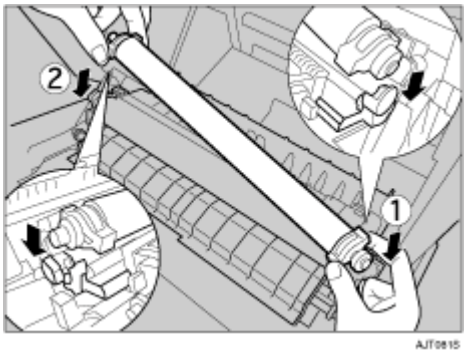
12 **Take out the new transfer roller.**

Important

❒ Do not touch the roller part.



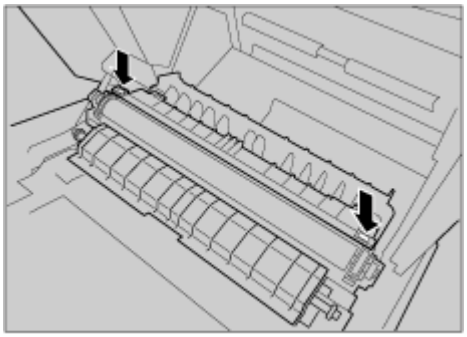
13 **Hold the green part as shown, and then insert the transfer roller into the printer.**



Important

❒ The end with the longer shaft must be to the left.

14 Close the transfer roller cover.



15 Close the front cover carefully.

16 Turn on the power.

17 Make the maintenance setting using the control panel.

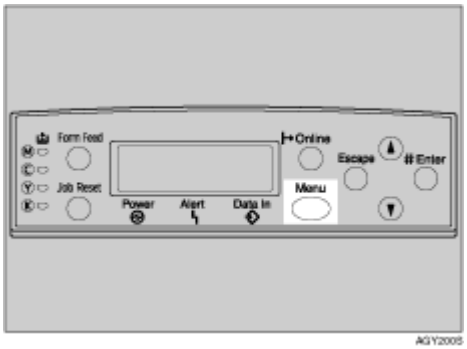
When “Replace Fusing Unit” Appears on the Display

1 If the following message appears on the control panel, hold down the 【Escape】key for at least five seconds. The message disappears and a maintenance reset is automatically performed.

```
Replace
Fusing Unit
```

When “Replace Fusing Unit soon” Appears on the Display

1 Press the 【Menu】key.



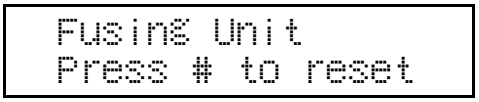
The **[Menu]**screen appears.

2 Press the 【▲】 or 【▼】 key to display [Maintenance], and then press the 【# Enter】 key.

3 Press the 【▲】 or 【▼】 key to display [Maint. Reset], and then press the 【# Enter】 key.

4 Press the 【▲】 or 【▼】 key to display [Fusing Unit], and then press the 【# Enter】 key.

The following message appears:



5 Press the 【# Enter】 key.

Wait a few seconds.

6 Press the 【Online】 key.

The initial screen appears.

Replacing the Intermediate Transfer Unit

⚠CAUTION

- *The inside of this machine gets very hot. Do not touch parts labelled "⚠" (hot surface). Touching "⚠" labelled parts could result in burns.*

Replace the transfer belt when the following message appears on the display:

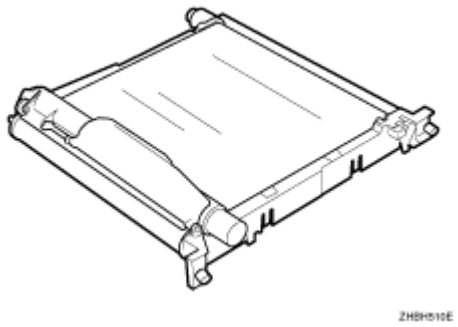
```
Replace Transfer
Belt soon
```

or

```
Replace
Transfer Belt
```

Check the contents of the box for the following items:

❖ **Transfer Belt**



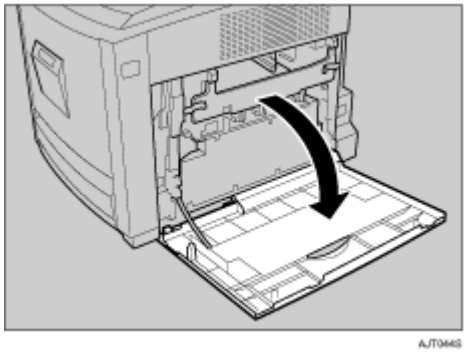
ZHBH510E

Important

❒ Be sure to make the maintenance setting using the control panel after replacing the transfer belt. The procedure is complete only when the maintenance setting is made.

1 Turn off the power, and then unplug the power cable.

2 **Open printer's right cover.**

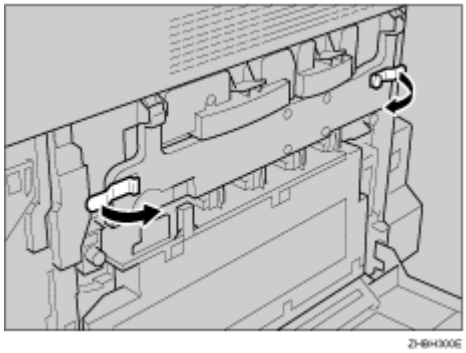


3 **Remove the waste toner bottle.**

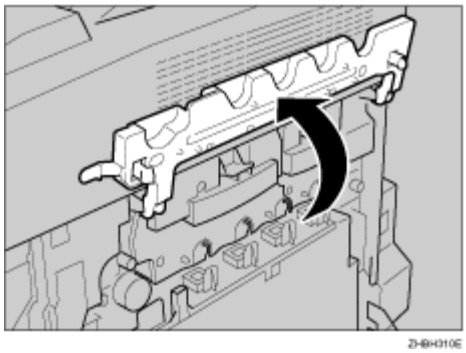
Reference

See p.32 “Replacing the Waste Toner Bottle”.

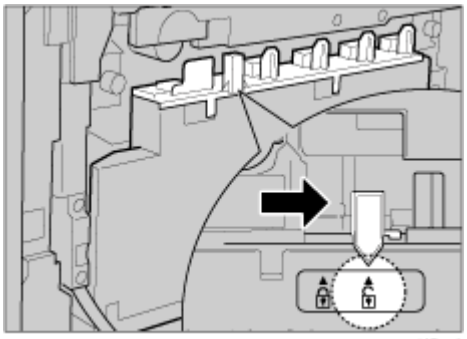
4 **Pull out the green levers on the left and right that are securing the inner cover.**



5 **Lift the inner cover until it stays up.**



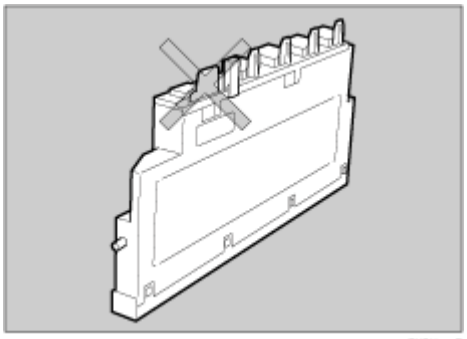
6 **Unlock the waste toner bottle by sliding the green arrow to the position shown.**



ACT013S

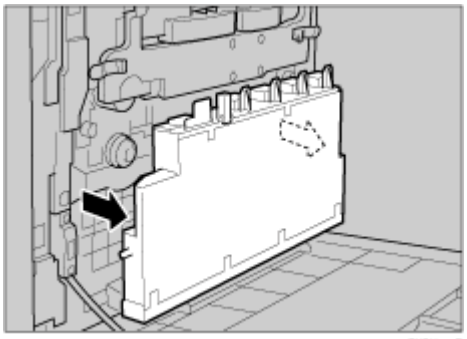
Important

❒ Do not lock the removed waste toner bottle. Toner may leak.



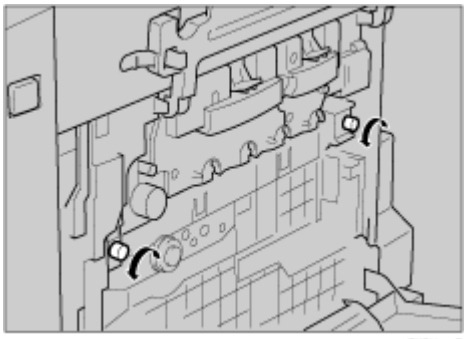
ZHBH640E

7 **Remove the waste toner bottle carefully.**



ZHBH650E

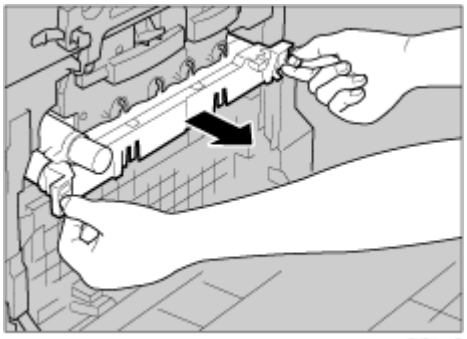
8 Loosen the green screws on the left and right by turning them the direction of the arrows.



ZHBH520E

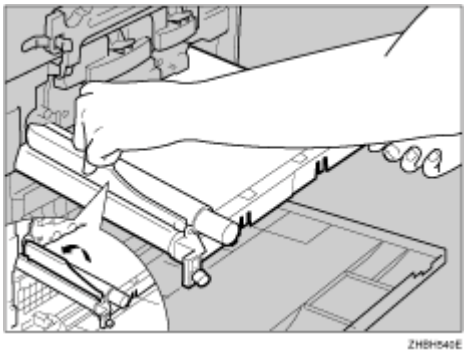
Do not remove the screws.

9 Pinch the both screws, and then carefully pull out the transfer belt slowly until it stops.



ZHBH530E

10 Raise the green cover, hold the transfer belt as shown, and then remove the transfer belt.



ZHBH540E

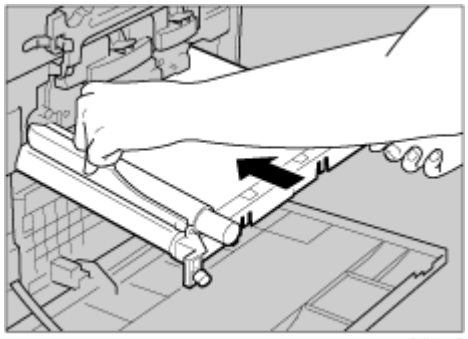
Important

❒ Be sure to hold the unit with both hands, and pull it out carefully.

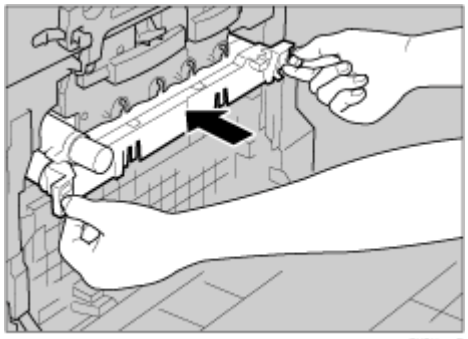
❒ Do not touch the belt part.

11 Take out the new transfer belt.

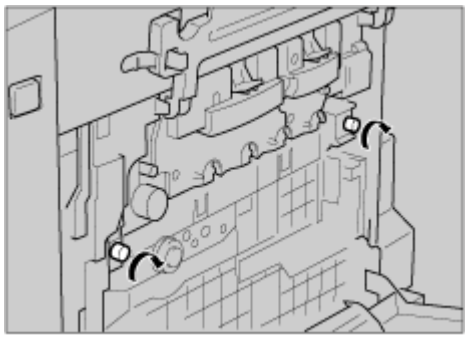
12 Holding the transfer belt as shown, carefully slide the transfer belt into the printer.



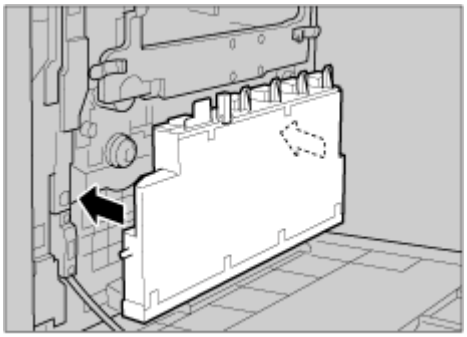
13 Close the green cover, and then push it in until it stops.



14 Tighten the green screws on the left and right by turning them the direction of the arrows.

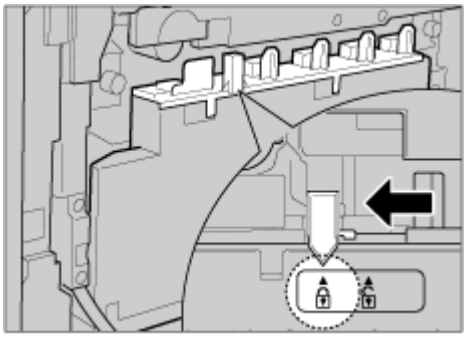


15 **Place the waste toner bottle in the position shown in the illustration.**



ZHBH660E

16 **Lock the waste toner bottle by sliding the green arrow to the position shown.**

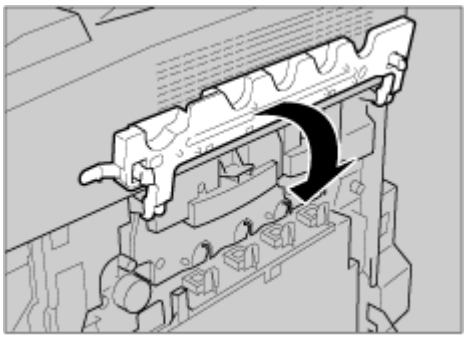


ZHBHA670E

Important

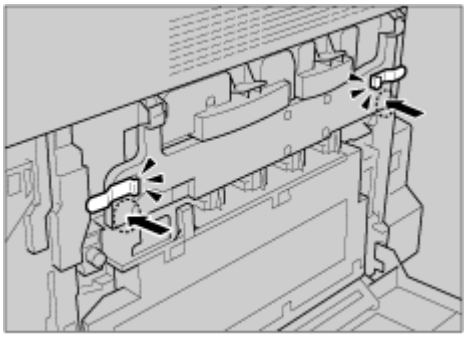
❒ Be sure to lock the waste toner bottle to prevent toner from leaking inside the printer.

17 **Lower the inner cover slowly.**

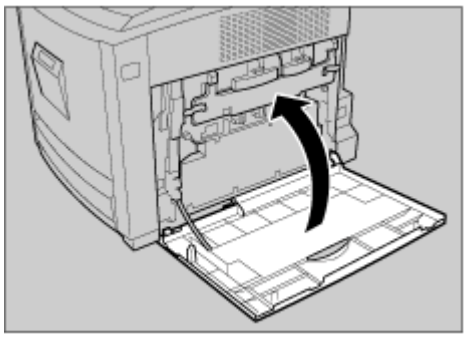


ZHBH410E

18 **Push the left and right edge of the inner cover to secure it.**



19 **Close the right cover.**



20 **Turn on the power.**

21 **Make the setting using the control panel.**

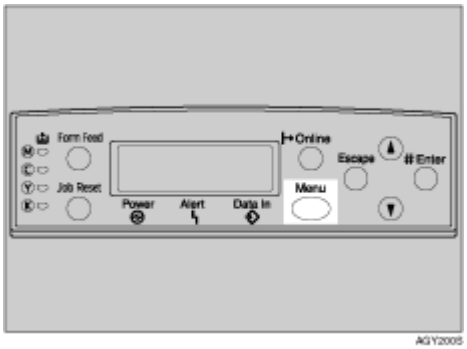
When “Replace Transfer Belt” Appears on the Display

1 **If the following message appears on the control panel, hold down the 【Escape】 key for at least five seconds. The message disappears and a maintenance reset is automatically performed.**

```
Replace
Transfer Belt
```

When “Replace Transfer Belt soon” Appears on the Display

1 Press the 【Menu】 key.



The **[Menu]** screen appears.

2 Press the 【▲】 or 【▼】 key to display [Maintenance], and then press the 【# Enter】 key.

```
Menu:
 Maintenance
```

3 Press the 【▲】 or 【▼】 key to display [Maint. Reset], and then press the 【# Enter】 key.

```
Maintenance:
 Maint. Reset
```

4 Press the 【▲】 or 【▼】 key to display [Transfer Belt], and then press the 【# Enter】 key.

```
Maint. Reset:
 Transfer Belt
```

The following message appears:

```
Transfer Belt
Press # to reset
```

5 Press the 【# Enter】 key.

Wait a few seconds.

6 Press the 【Online】 key.

The initial screen appears.

Cautions to Take When Cleaning

⚠WARNING

- ***Do not remove any covers or screws other than those specified in this manual. Some parts of the machine are at a high voltage and could give you an electric shock. Also, if the machine has laser systems, direct (or indirect) reflected eye contact with the laser beam may cause serious eye damage. When the machine needs to be checked, adjusted, or repaired, contact your service representative.***
- ***Do not take apart or attempt any modifications to this machine. There is a risk of fire, electric shock, explosion or loss of sight. If the machine has laser systems, there is a risk of serious eye damage.***

⚠CAUTION

- *When removing misfed paper, do not touch the fusing unit because it could be very hot.*

Clean the printer periodically to maintain fine printing.

Dry wipe the exterior with a soft cloth. If dry wiping is not enough, wipe with a soft, wet cloth that is wrung out well. If you still cannot remove the stain or grime, use a neutral detergent, and then wipe over with a well-wrung wet cloth, dry wipe, and let it dry.

Important

❒ To avoid deformation, discoloration, or cracking, do not use volatile chemicals, such as benzine and thinner, or spray insecticide on the printer.

❒ If there is dust or grime inside the printer, wipe with a clean, dry cloth.

❒ You must disconnect the plug from the wall outlet at least once a year. Clean away any dust and grime from the plug and outlet before reconnecting. Accumulated dust and grime pose a fire hazard.

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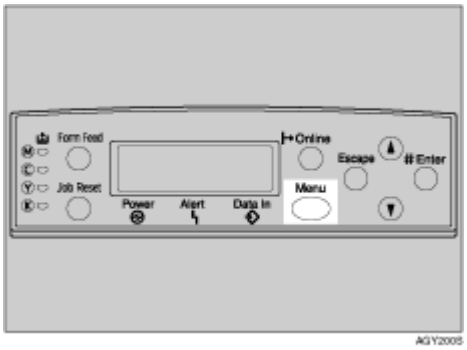
Adjusting the Color Registration

If documents show color degradation after the printer is moved, perform automatic color adjustment.

1 Press the [Menu] key.



The **[Menu]** screen appears.

2 Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.

```
Menu:
 Maintenance
```

The maintenance menu appears.

3 Press the [▲] or [▼] key to display [Color Regist.], and then press the [# Enter] key.

The check message appears.

```
Press #
to adjust
```

4 Press the [# Enter] key.

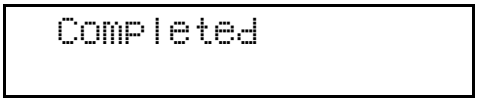
Automatic color adjustment begins, and the following message appears.

```
Adjusting...
```

Important

❒ To avoid malfunction, do not turn off the power while **[Adjusting...]** appears on the display.

Automatic color adjustment takes about 30 seconds. A confirmation message appears when complete.



5 Press the【Escape】key.

Return to the maintenance menu.

6 Press the【Online】key.

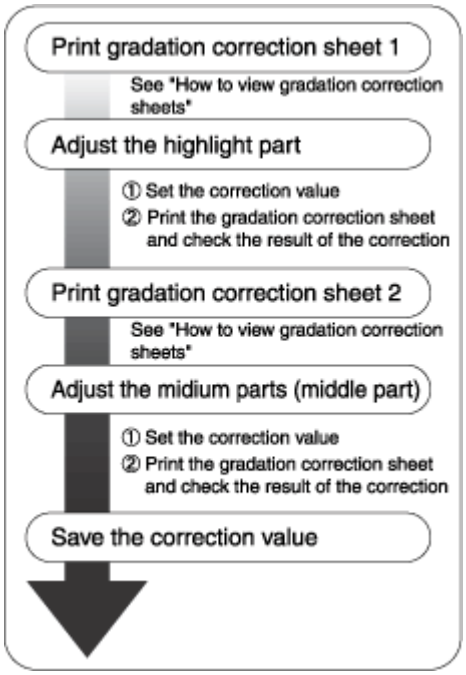
The initial screen appears.

Correcting the Color Gradation

Color gradation during color printing changes slightly, depending on a number of factors. If you print the same file repeatedly or toner was recently replaced, changes may occur in color tones. When this happens, to obtain suitable print results, color gradation can be corrected, although it is not usually necessary to make any particular settings.

Note

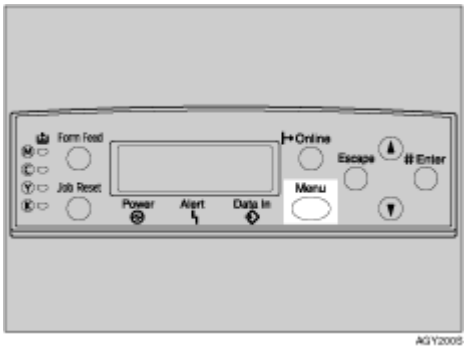
- ❒ If suitable results cannot be obtained after a single operation, repeat the correction several times, as needed.
- ❒ Corrections to color gradation will be applied to all user jobs.
- ❒ Use the same paper when printing a run of gradation corrections. If a different type of paper is used, corrections may not be apparent.
- ❒ This requires the use of the supplied Color Calibration Sample Sheet.
- ❒ Corrections to color gradation are performed in the following order:



Set the Gradation Correction Value

During printing, you can correct the gradation in two areas: bright part (highlight) and the medium (middle). The correction value for the highlight and the medium parts are set using “Calibr.1” and “Calibr.2” respectively.

1 Press the 【Menu】 key.



The **[Menu]**screen appears.

2 Press the 【▲】 or 【▼】 key to display [Maintenance], and then press the 【# Enter】 key.

```
Menu:
 Maintenance
```

The maintenance menu appears.

3 Press the 【▲】 or 【▼】 key to display [Color Calibrate], and then press the 【# Enter】 key.

Note

❒ If you perform only correction 2, proceed to step 12.

4 Check [Start Calibr. 1] is displayed, and then press the 【# Enter】 key.

5 Check [Yes] is displayed, and press 【# Enter】 key to print gradation correction sheet 1.

6 Set the gradation correction value of the highlighted part using correction 1. For setting K (black) gradation, hold the correction value (0-6) for "K" of the correction value setting sheet 1 over the color sample (K) for gradation correction 1 of the Color Calibration Sample Sheet, and set the numerical value of the closest color using either the 【▲】 or 【▼】 key.

Set the correction value using the supplied Color Calibration Sample Sheet and the gradation correction sheet 1 printed in the previous step.

Set M (magenta), C (cyan), and Y (yellow) using the same method.

```
Calibrate 1:
 K:3 M:3 C/Y:3/3
```

Note

❒ Each time the [▲] or [▼] key is pressed, the value increases or decreases respectively, in increments of 1.

❒ The correction value can be set between 0 and 6.

7 Press the [# Enter] key after setting the K (black) gradation. The cursor shifts to M (magenta).

8 Set the gradation correction values for M (magenta), C (cyan), and Y (yellow) using the same procedure as for the K (black).

9 If you finished all settings, ensure that the cursor is on the correction value for Y (yellow), and then press the [# Enter] key.

The example shows the display of the control panel when the correction value for each color is changed to 2.

10 Check [Yes] is displayed, and press the [# Enter] key to print the correction result.

11 Check gradation correction sheet 1. To save the correction values, check [Save and exit] is displayed and press the [# Enter] key. If you do not want to save the correction values after this procedure, press the [▲] or [▼] key to display [Exit don't save], and then press the [# Enter] key.

Note

❒ If you complete this procedure without saving the correction values, the changes will not be applied to subsequent print jobs.

This concludes the setting for correction 1. Next, proceed to correction 2.

12 Press the [▼] key to display [Start Calibr. 2], and then press the [# Enter] key.

13 Check [Yes] is displayed, and then press the [# Enter] key to print gradation correction sheet 2.

14 Perform the same operations as used for setting the gradation correction value using correction 1 to set the gradation correction value of the middle part using correction 2.

15 After completing all settings, press the [Online] key.

The initial screen appears.

Note

❒ Displays on the screen are just examples.

Viewing the Color Calibration Sample Sheet and Gradation Correction Sheet

The color gradation correction value setting sheet contains two color sample columns: the “Sample 1” column for setting the highlight part and the “Sample 2” column for setting the middle part.

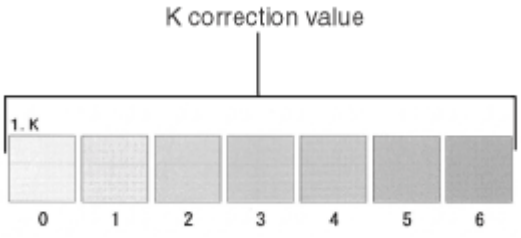
Similarly, there are two gradation correction sheets: “Gradation correction sheet 1” for setting the highlight part and “Gradation correction sheet 2” for setting the middle part. Gradation correction sheet 1 is used for calibration 1, while Gradation correction sheet 2 is used for calibration 2.

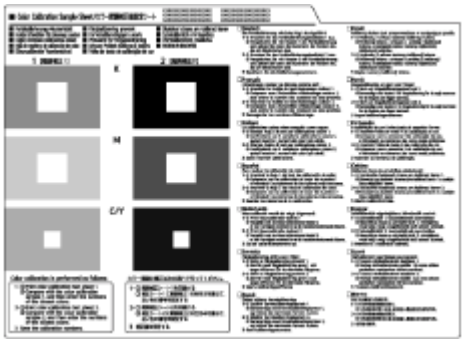
❖ **Color sample and correction values**

The following explains how to view the color sample of the Color Calibration Sample Sheet and the correction values of the gradation correction sheet.
This explanation uses setting K (black) as an example. The setting method for M (magenta) is similar. For C/Y (cyan/yellow), the correction value is determined based on combinations of these two colors, although panel settings are made for each color.

Note

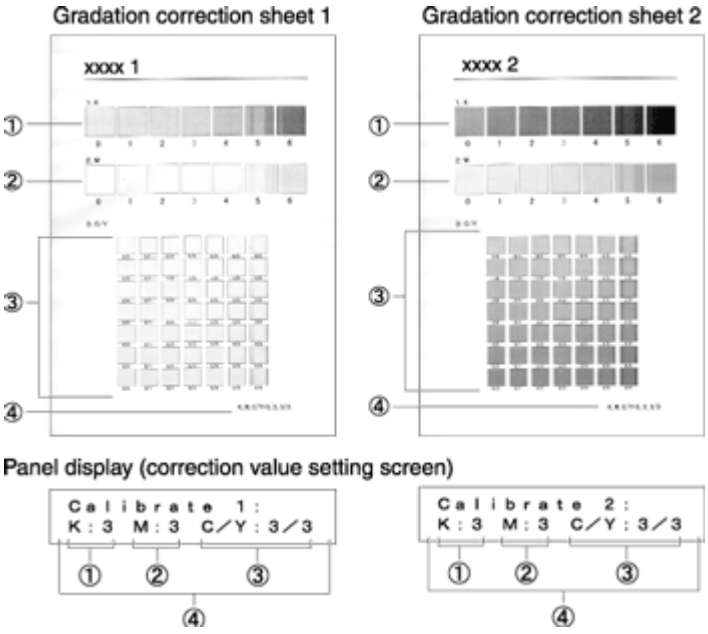
❒ Hold the correction value (0-6) for “K” of the correction value setting sheet over the color sample of gradation correction 1 of the Color Calibration Sample Sheet and search for a corrected color closest to that of the color sample, and then set its correction value using the operation panel. The currently set correction value is printed in red.





❖ **Relationship between gradation correction sheet and display**

The printed gradation correction sheet and display correspond as shown in the following diagram. The gradation correction sheets are used to determine the correction values for the colors K (black), M (magenta), C (cyan), and Y (yellow). These values are set using the control panel.



Note

❒ XXXX represents the printer model name.

① **K (black) correction values**
Adjust the printed color when only black toner is used. The currently set correction value is printed in red.

② **M (magenta) correction values**
Adjust the printed color when only magenta toner is used. The currently set correction value is printed in red.

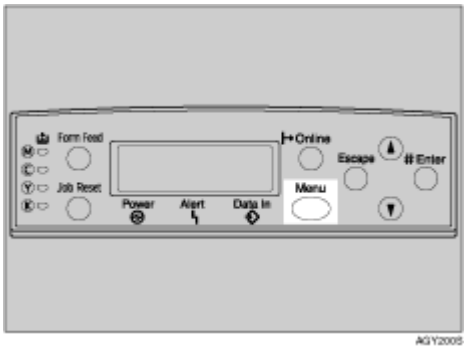
③ **C (cyan)/Y (yellow) correction values**
Correct the color printed when cyan and yellow are used. For C/Y (cyan/yellow), the correction value is determined based on a combination of these two colors, although settings are made for separately each color.

④ **K, M, C/Y**
The numerical value set at time of gradation correction sheet printing is displayed. This corresponds to the numerical value set using the operation panel.

Resetting the gradation correction value to the initial value

Reset the correction value default.

1 Press the 【Menu】 key.



The **[Menu]**screen appears.

2 Press the 【▲】 or 【▼】 key to display [Maintenance], and then press the 【# Enter】 key.

```
Menu:
 Maintenance
```

The maintenance menu appears.

3 Press the 【▲】 or 【▼】 key to display [Color Calibrate], and then press the 【# Enter】 key.

4 Press the 【▲】 or 【▼】 key to display [Reset], and then press the 【# Enter】 key.

```
Color Calibrate:
 Reset
```

A confirmation message is displayed.

```
Press # to reset
Calibration
```

5 Press the 【# Enter】 key.

A message indicating the gradation correction value has returned to default, is displayed.

```
Calibration was
reset
```

After about 2 seconds, the display returns to the **[Color Calibrate: Reset]** menu.

6 Press the 【Online】 key.

The initial screen appears.

Adjusting the Image Density

Adjust the image density when the print side of the page appears shaded or the print image is patchy.

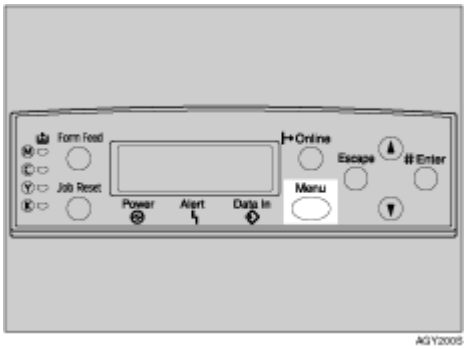
Important

- ❒ Extreme settings may create output that appears dirty.
- ❒ Image density settings should be made from the application or the printer driver whenever possible.

Note

- ❒ Changing the image density setting can result in deterioration of color balance. We recommend you leave the image density at its factory default setting.

1 Press the [Menu] key.



The **[Menu]**screen appears.

2 Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.

```
Menu:
 Maintenance
```

3 Press the [▲] or [▼] key to display [Image Density], and then press the [# Enter] key.

```
Maintenance:
 Image Density
```

The following message appears on the display:

```
Image Density:
 Prt. Test Sheet
```

4 Press the [# Enter] key.

When following message appears on the display, press the [# Enter] key.

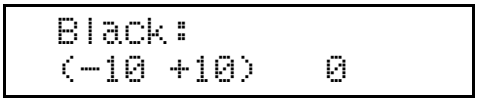
5 Compare the colors on the printed image density test sheet with those on the Image Density Adjusting Card.

Note

- ❒ If the image density of the Image Density Adjusting Card is equal to the framed part of the test sheet, do not adjust the image density value.
- ❒ If the image density of the Image Density Adjusting Card is equal to the density shown above the frame, select "-" as the image density setting. If the image density of the Image Density Adjusting Card is equal to the density shown below the frame, select "+" as the image density setting.

6 Press the [▲] or [▼] key to select the color you want to adjust, and then press the [# Enter] key.

7 Press the [▲] or [▼] key to set the image density value, and then press the [# Enter] key.



Note

- ❒ You can adjust the image density in 21 increments, from -10 to +10. Increasing the value makes printouts darker and decreasing the value makes printouts lighter.
- ❒ Pressing the [▲] or [▼] key increases or decreases the value in increments of one.

To adjust another color, repeat steps 6 and 7.

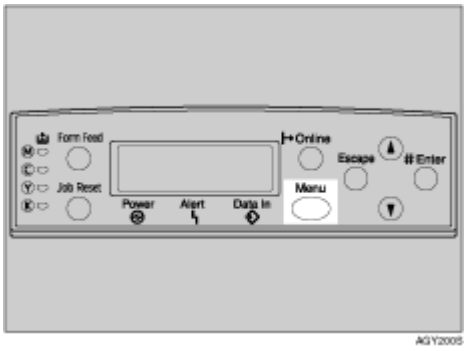
8 Press the [Online] key.

The initial screen appears.

Adjusting Tray Registration

You can adjust the registration of each tray. The vertical adjustment is used for all trays. Normally, you need not update the registration. But when the optional paper feed unit or the duplex unit is installed, updating is useful in some cases. The following procedure describes how to adjust tray 2. The same procedure applies to other trays as well.

1 Press the 【Menu】 key.



The **[Menu]**screen appears.

2 Press the 【▲】 or 【▼】 key to display [Maintenance], and then press the 【# Enter】 key.

```
Menu:
 Maintenance
```

The maintenance menu appears.

3 Press the 【▲】 or 【▼】 key to display [Registration], and then press the 【# Enter】 key.

The registration menu appears.

4 Print the test sheet to preview the settings. Confirm that [Prt. Test Sheet] is displayed, and then press the 【# Enter】 key.

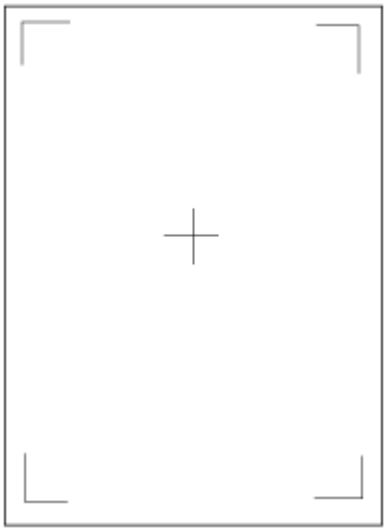
A screen prompting you to select the tray to be adjusted appears.

5 Press the 【▲】 or 【▼】 key to select the tray to adjust, and then press the 【# Enter】 key.

```
Prt. Test Sheet:
 Tray 2
```

The test sheet prints out. The display returns to the registration menu. Press the 【**Escape**】 key.

6 Confirm the position of the image on the test sheet, and then adjust the registration value.



In this setting, adjust the margins of the test sheet so that they are equal in size.

7 Press the [▲] or [▼] key to display [Adjustment], and then press the [# Enter] key.

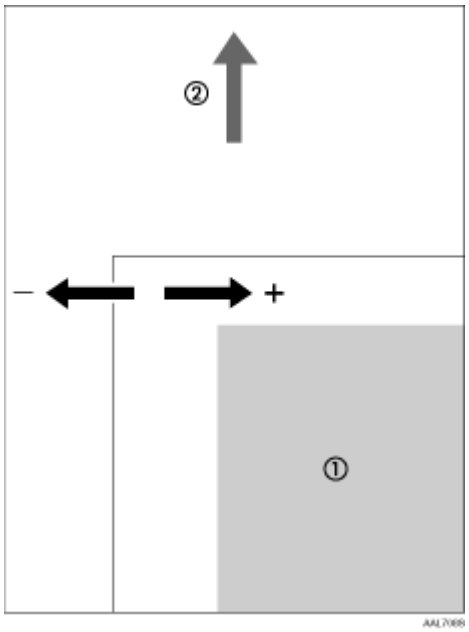
8 Press the [▲] or [▼] key to display the parameter to be adjusted, and then press the [# Enter] key.

```
Adjustment:
 Horiz: Tray 2
```

9 Press the [▲] or [▼] key to set the registration value (mm).

```
Horiz: Tray 2:
(-15 +15)      0
```

Increase the value to shift the print area in the positive direction, and decrease to shift in the negative direction.



① : Print Area

② : Feed Direction

Note

❒ Pressing the 【▲】 or 【▼】 key makes the value increase or decrease by 1.0 mm steps.

⑩ Press the 【# Enter】 key.

The display returns to the print area **[Adjustment]** menu.

```
Registration:
 Adjustment
```

⑪ Print the test sheet to confirm the adjustment result.

⑫ Press the 【Online】 key.

The initial screen appears.

Error & Status Messages on the Control Panel

This section explains what the messages that appear on the control panel mean and what to do when a particular message appears.

❖ Messages (in alphabetical order)

Messages	Description	Recommended Action
Add Toner Black	The printer is out of toner (Black).	Replace the toner cartridge (Black). See p.28 “Replacing the Toner Cartridge”.
Add Toner Cyan	The printer is out of toner (Cyan).	Replace the toner cartridge (Cyan). See p.28 “Replacing the Toner Cartridge”.
Add Toner Magenta	The printer is out of toner (Magenta).	Replace the toner cartridge (Magenta). See p.28 “Replacing the Toner Cartridge”.
Add Toner Yellow	The printer is out of toner (Yellow).	Replace the toner cartridge (Yellow). See p.28 “Replacing the Toner Cartridge”.
Add Toner XXX/XXX	The printer is out of the indicated toner(s). XXX: Yellow/Magenta/Cyan/Black	Replace the toner cartridge of the indicated color(s). See p.28 “Replacing the Toner Cartridge”.
Calibrating...	The printer is calibrating the color.	Wait a while.
Call Service: EC Power Off On / Call Service if error reoccurs	A communication error sent from the engine to the controller.	A communication error sent from the engine to the controller.
Cannot check Signal in Ad hoc	An attempt to check the radio signal was made while the communication mode was set to **[Ad hoc]** in the interface settings.	To check the radio signal , select Infrastructure in the communication mode settings.

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Messages	Description	Recommended Action
Change Setting Tray # / Paper Size: Paper Type:	The paper size and type setting in the tray differs from that of actual paper size and type in the tray.	Load paper of the selected size in the tray, and then change the paper size setting with the control panel. Or, press **【Form Feed】**, and then select the tray using the control panel. Or, press **【Job Reset】** to cancel the print job.
Close Front and/ or Right Cover	The front cover or right cover is open.	Close the front cover or right cover.
Close Upper Left Cover	The upper left cover open.	Close the upper left cover.
DHCP assigned Cannot change	An attempt to change the IP address, subnet mask or gateway address was made while DHCP was set to **[On]**.	Make the change after setting DHCP to **[Off]**.
Energy Save Mode	In Energy Save Mode level 2.	No action required.
Error: Enter 10 or 26 characters	An ID with an invalid number of digits was entered for the WEP key.	Enter the correct number of digits for the WEP key.
Error: Enter 5 or 13 characters	An ID with an invalid number of digits was entered for the WEP key.	Enter the correct number of digits for the WEP key.
Hardware Problem Ethernet	The printer identified an Ethernet error.	Turn the power off, and then on. If the message appears again, contact your sales or service representative.
Hardware Problem HDD	The printer identified a HDD Board error.	Turn the power off, and then on. Remove and re-install the HDD board correctly. If the message appears again, contact your sales or service representative. See “Attaching Printer Hard Disk Type 3000”, Setup Guide.

Messages	Description	Recommended Action
Hardware Problem IEEE1394	The printer identified an IEEE 1394 interface board error.	Turn the power off, and then on. Remove and re-install the IEEE 1394 interface board correctly. ① Check the IEEE 1394 interface board is correctly attached to the computer. ② Check the IEEE 1394 interface cable is securely connected. ③ Unplug the IEEE 1394 interface cable which is connected to the printer. ④ Restart the computer. If the message appears even after executing above operation, proceed to the following steps. ⑤ Execute the utility tool for IEEE 1394 interface board that is stored in the following path in the CD-ROM labeled “Printer Drivers and Utilities”: UTILITY 1394 Important ❒ For details about using the utility tool for IEEE 1394, see the README file in the same directory in the CD-ROM. If the message appears again, contact your sales or service representative. See “Attaching IEEE 1394 Interface Board Type B”, Setup Guide.
Hardware Problem Black PCU	The printer detected an error in the black photo conductor unit.	Turn the power off, and then on. Remove and re-install the photo conductor unit correctly. If the message appears again, contact your sales or service representative.

Messages	Description	Recommended Action
Hardware Problem Color PCU	The printer detected an error in the color photo conductor unit.	Turn the power off, and then on. Remove and re-install the photo conductor unit correctly. If the message appears again, contact your sales or service representative.
Hardware Problem Option RAM	The printer identified an optional RAM error.	Turn the power off, and then on. Remove and re-install the optional RAM. If the message appears again, contact your sales or service representative. See ”Attaching Memory Unit Type D 128MB, Memory Unit Type E 256MB(SDRAM Module)”, Setup Guide.
Hardware Problem Parallel I/F	There is a problem with the parallel interface.	If you use the parallel I/F, replace the interface cable that caused the error. Turn the power off, and then on. Remove and re-install the IEEE 1284 interface board correctly. If the message appears again, contact your sales or service representative.
Hardware Problem Printer font	Problems with the font file for the Printer module.	It is necessary to replace the print module.
Hardware Problem USB	There is a problem related to the Universal Serial Bus Connection and Hardware.	Turn the power off, and then on. If the message appears again, contact your sales or service representative.
Hardware Problem Wireless Board	An error was detected in the IEEE 802.11b interface unit or the Bluetooth interface unit.	Turn the power off, and then on. Remove and re-install the IEEE 802.11b interface unit or the Bluetooth interface unit correctly. If the message appears again, contact your sales or service representative. See “Attaching IEEE 802.11b Interface Unit Type H” or “Attaching Bluetooth Interface Unit Type 3245”, Setup Guide.

Messages	Description	Recommended Action
Hardware Problem Wireless Card	The IEEE 802.11b interface unit or the Bluetooth interface unit could not be detected when the power was turned on. The IEEE 802.11b interface card or the Bluetooth interface card was removed after the power was turned on. An error was detected in the IEEE 802.11b interface card or the Bluetooth interface card.	Turn the power off, and then on. Remove and re-install the IEEE 802.11b interface unit or the Bluetooth interface unit correctly. If the message appears again, contact your sales or service representative. See “Attaching IEEE 802.11b Interface Unit Type H” or “Attaching Bluetooth Interface Unit Type 3245”, Setup Guide.
Hex Dump Mode	In Hex Dump Mode.	No action required.
Invalid Data Power Off On	The printer has received irregular data.	Turn the power off, and then on. If the message appears again, contact your sales or service representative.
Invalid Password Try again	The password entered using the control panel is not correct.	Enter the correct password using the control panel.
Load Correct Size Paper / Press # to continue	The paper size set in the indicated tray differs from the setting made.	Load paper of the selected size in the tray, and then press the 【**# Enter**】 key to resume printing. If you want to ignore the message and continue printing, press the 【**# Enter**】 key.
Load Paper:Tray # or Form Feed / Paper Size: Paper Type:	The indicated tray is out of paper. #: tray number	Load paper into the indicated paper tray.
Load Paper or Form Feed / Paper Size: Paper Type:	① The printer received a request for a paper type, or paper size not supported by printer, and Tray Locking is not applicable. ② The paper type and size loaded in the tray which the printer searched using Tray Locking is invalid for Duplex Print.	Change the setting of the indicated paper input tray, or press 【**Job Reset**】 key. Form Feed is not possible here.
Loading Toner...	The printer is loading toner.	Wait a while.
Menu Protected Cannot change	The menu is protected and the setting cannot be changed.	Wait for two seconds until the previous display appears.

Messages	Description	Recommended Action
No Files exist	There are no files available for Sample Print job or Locked Print job.	Wait for two seconds until the previous display appears.
Offline	The printer is offline and cannot print data.	Press【**Online**】key.
Please wait...	The printer is cooling down.	Wait a while.
Processing...	Print data is being processed.	Wait a while.
RC Gate connection error	Cannot communicate with RC Gate.	Check the device or the RC Gate network connection.
Ready	The default ready message. The printer is ready to use.	No action required.
Remove Misfeed B: Fusing Unit	There is a misfeed in the fusing unit.	Remove the misfed paper. See p.99 “When “Remove Misfeed B: Fusing Unit” Appears”.
Remove Misfeed A: Internal Path	There is a misfeed in the printer.	Remove the misfed paper. See p.96 “When “Remove Misfeed A: Internal Path” Appears”.
Remove Misfeed Y: Paper Tray	There is a misfeed in the input tray, or the printer is not feeding paper.	Remove the misfed paper. See p.102 “When “Remove Misfeed Y: Paper Tray” Appears”.
Remove Misfeed Z: Duplex Unit	There is a misfeed in the duplex unit.	Remove the misfed paper. See p.104 “When “Remove Misfeed Z: Duplex Unit” Appears”.
Remove Paper Standard Tray	The standard output tray is full.	Remove paper from the standard output tray.
Replace Black PCU	It is time to replace the black PCU.	Replace the black PCU. See p.35 “Replacing the Photo Conductor Unit”.
Replace Black PCU soon	The time to replace the black PCU is soon.	Prepare to replace the black PCU when the message **[Replace Black PCU]** appears on the display.
Replace Color PCU	It is time to replace the color PCU.	Replace the color PCU. See p.35 “Replacing the Photo Conductor Unit”.

Messages	Description	Recommended Action
Replace Color PCU soon	The time to replace the color PCU is soon.	Prepare to replace the color PCU when the message **[Replace Color PCU]** appears on the display.
Replace Fusing Unit	It is time to replace the fusing unit.	Replace the fusing unit with a new one. See p.44 “Replacing the Fusing Unit”.
Replace Fusing Unit soon	The time to replace the fusing unit soon.	Prepare to replace the fusing unit when the message **[Replace Fusing Unit]** appears on the display.
Replace Transfer Belt	It is time to replace the transfer belt.	Replace the transfer belt with a new one. See p.51 “Replacing the Intermediate Transfer Unit”.
Replace Transfer Belt soon	The time to replace the transfer belt.	Prepare to replace the transfer belt when the message **[Replace Transfer Belt]** appears on the display.
Replace Used Toner Bottle	It is time to replace the waste toner bottle.	Replace the waste toner bottle. See p.32 “Replacing the Waste Toner Bottle”.
Reset Fusing Unit correctly	There is no fusing unit, or the fusing unit is not installed correctly.	Set the fusing unit correctly.
Reset Paper Bypass Tray	There is paper left in the bypass tray.	Remove paper from the bypass tray, and then reset the paper.
Reset PCU correctly XXX/XXX	The indicated photo conductor unit(s) is/are not set correctly, or not set. XXX: Yellow/ Magenta/Cyan/Black	Set the indicated photo conductor unit(s) correctly. See p.35 “Replacing the Photo Conductor Unit”.
Reset Toner XXX/XXX	The indicated toner cartridge is not set correctly. XXX: Yellow/Magenta/Cyan/Black	Set the indicated toner cartridge(s) correctly. See p.28 “Replacing the Toner Cartridge”.
Reset Tray # or Form Feed	The indicated paper input tray is not set correctly, or not set.	Set the indicated paper input tray correctly.
Resetting Job...	A job is being reset.	Wait a while.
ROM Update Waiting for Data	The printer is waiting for updated data.	Don't turn off the printer while it is waiting for data.

Messages	Description	Recommended Action
ROM Update Receiving Data	The printer is receiving updated data.	Don't turn off the printer while it is receiving data.
SC XXX-X Power Off On / Call Service if error reoccurs	Turn the power off and then on. If the message appears again, contact your sales or service representative.	Turn the power off, and then on. If the message appears again, contact your sales or service representative.
SD authenticatn. failed	Authentication for the SD card has failed.	Turn the power switch off and then back on again. If the message appears again, contact your sales or service representative.
Setting change in process	The settings are being changed.	Wait a while.
Set Transfr.Belt or UsedTonerBtl.	The transfer belt or waste toner bottle is not set correctly, or not set.	Set transfer belt or waste toner bottle correctly.
SSID not entered	This message appears if the SSID has not been entered.	Enter the SSID.
Supply order failed	Supply order has failed.	The use is required to reset the job.
Toner is almost empty: Black	The printer is almost out of toner (Black).	Prepare to replace the toner cartridge (Black) when the message **[Add Toner Black]** appears on the display.
Toner is almost empty: Cyan	The printer is almost out of toner (Cyan).	Prepare to replace the toner cartridge (Cyan) when the message **[Add Toner Cyan]** appears on the display.
Toner is almost empty: Magenta	The printer is almost out of toner (Magenta).	Prepare to replace the toner cartridge (Magenta) when the message **[Add Toner Magenta]** appears on the display.
Toner is almost empty: Yellow	The printer is almost out of toner (Yellow).	Prepare to replace the toner cartridge (Yellw) when the message **[Add Toner Yellow]** appears on the display.
Update Mode Err. Power Off On	The printer has failed to start updating data.	Turn the printer OFF and then back ON to restart.
Used Toner is almost full	The waste toner bottle is almost full.	Prepare to replace the waste toner bottle. See p.32 “Replacing the Waste Toner Bottle”.

Messages	Description	Recommended Action
Waiting...	The printer is waiting for the next data to print.	Wait a while.
Warming up...	The printer is warming up and not ready.	Wait until the printer signals Ready.

Printer Does Not Print

Possible Cause	Solutions
Is the power on?	Confirm that the cable is securely plugged into the power outlet and the printer. Turn on the power.
Does the **Online** indicator stay on?	If not, press 【**Online**】 key to light it.
Does the **Alert** indicator stay red?	If so, check the error message on the display and take the required action.
Is paper loaded?	Load paper into the paper tray or onto the bypass tray. See p.15 “Loading Paper”.
Can you print a configuration page?	If you cannot print a configuration page, it probably indicates a printer malfunction. Contact your sales or service representative. See “Test Printing”, Setup Guide.
Is the interface cable connected securely to the printer and the computer?	Connect the interface cable securely. If it has a fastener, fasten it securely as well.
Are you using the correct interface cable?	The type of interface cable you should use depends on the computer you use. Be sure to use the correct one. If the cable is damaged or worn, replace it with a new one. See p.111 “Specifications”.
Is the **Data In** indicator blinking or lit after starting the print job?	If not blinking or lit, the data is not being sent to the printer. ❖ **If the printer is connected to the computer using the interface cable** Check the port connection setting is correct. For details about checking the port connection, see p.84 “Checking the port connection”. ❖ **Network Connection** Contact your network administrator.
How is the signal strength when using the wireless LAN?	❖ **Ad hoc Mode or 802.11 Ad hoc Mode** Either move to a location where the signal is good, or remove obstructions. ❖ **Infrastructure Mode** Check the signal status from the **[Maintenance]** menu on the control panel. If the signal is poor, either move to a location where it is good, or remove obstructions.

Possible Cause	Solutions
How is the signal strength when using Bluetooth ?	Try the following: • Check the Bluetooth interface unit is installed properly. • Check there are no obstructions between computer, printer and other devices. • Change the location of the computer. • Change the location of the printer.
When you use the optional Bluetooth interface unit.	SPP ① Make sure the machine you want to use appears in the 3Com Bluetooth Connection Manager. ② Make sure “Bluetooth Serial Client (COMx)” appears under Client Ports in the 3Com Bluetooth Connection Manager. ③ Restart computer, this printer, and the other devices. ④ Make sure no IEEE 802.11b (wireless LAN) or other Bluetooth devices are in use. Note ❒ Interference may occur with the IEEE 802.11b wireless LAN interface board. Such interference may affect the transmission speed and other functions. ⑤ Transmissions between computers, other devices, and this printer can be blocked by obstructions. Move this printer, computers, and other devices, if necessary. HCRP, BIP ① Restart the computer, this printer, and other devices. ② Make sure no IEEE 802.11b (wireless LAN) or other Bluetooth devices are in use. Note ❒ Interference may occur with the IEEE 802.11b wireless LAN interface board. Such interference may affect the transmission speed and other functions. ③ Transmissions between computers, other devices, and this printer can be blocked by obstructions. Move this printer, computers, other devices, if necessary.

If printing still does not start, contact your sales or service representative. Consult with the store where the printer was purchased for information about the location of sales or service representatives.

Checking the port connection

When the printer is directly connected via the PC cable and the data-in indicator does not flash or light up, the method of checking the port connection is as follows.

- For a parallel port connection, port LPT 1 or LPT 2 should be set.
- For a USB port connection, port USB00 (n) *1 should be set.

- For a IEEE 1394 (SCSI print) port connection, port 1394_00 (n) [*1] should be set.

[*1] (n) is the number of printers connected.

Windows 95/98/Me

1 Click [Start], point to [Settings] and then click [Printers].

2 Click to select the icon of the printer. Next, on the [File] menu, click [Properties].

3 Click the [Details] tab.

4 Check the [Print to the following port] box to confirm that the correct port is selected.

Windows 2000

1 Click [Start], point to [Settings] and then click [Printers].

2 Click to select the icon of the printer. Next, on the [File] menu, click [Properties].

3 Click the [Port] tab.

4 Check the [Print to the following port] box to confirm that the correct port is selected.

Windows XP Professional, Windows Server 2003

1 Access the [Printers and Faxes] window from [Start] on the taskbar.

2 Click to select the icon of the printer. Next, on the [File] menu, click [Properties].

3 Click the [Port] tab.

4 Check the [Print to the following port(s).] box to confirm that the correct port is selected.

Windows XP Home Edition

1 Access the [Control Panel] window from [Start] on the taskbar.

2 Click [Printers and Other Hardware].

3 Click [Printers and Faxes].

4 **Click to select the icon of the printer. Next, on the [File] menu, click [Properties].**

5 **Click the [Port] tab.**

6 **Check the [Print to the following port(s).] box to confirm that the correct port is selected.**

Windows NT 4.0

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1 **Click [Start], point to [Settings] and then click [Printers].**

2 **Click to select the icon of the printer. After that, on the [File] menu, click [Properties].**

3 **Click the [Port] tab.**

4 **Check the [Print to the following port] box to confirm that the correct port is selected.**

Other Printing Problems

Status	Possible Causes, Descriptions, and Solutions
Toner smears appear on the print side of the page.	The paper setting may not be correct. For example, although you are using thick paper, the setting for thick paper may not be set. • Check the paper settings. See p.9 “Types of Paper and Other Media”. • Check the printer driver's paper settings. See the printer driver Help.
	When **[Replace Black PCU]** or **[Replace Color PCU]** appears on the display, replace the photo conductor unit. See p.35 “Replacing the Photo Conductor Unit”.
	Confirm that the paper is not curled or bent. Envelopes can be curled easily. Flatten paper before loading. See p.5 “Paper and Other Media Supported by This Printer”.
Paper jams occur frequently.	Number of paper set in the tray exceeds the limit. Confirm that the top of the stack is not higher than the limit mark inside the tray. See p.15 “Loading Paper”.
	There may be a gap between the rear guide and the paper, or between the side guides and the paper in the paper tray. Make sure there are no gaps. See p.15 “Loading Paper”.
	Paper is either too thick or too thin. See p.5 “Paper and Other Media Supported by This Printer”.
	Paper is bent or wrinkled. Use paper that have no bents or wrinkles. See p.5 “Paper and Other Media Supported by This Printer”.
	Paper has already been printed on. See p.5 “Paper and Other Media Supported by This Printer”.
	Paper is damp. Use paper that has been stored properly. See p.5 “Paper and Other Media Supported by This Printer”.
	When loading paper, separate paper from each other.

Status	Possible Causes, Descriptions, and Solutions
Multiple pages are fed at once.	There may be a gap between the rear guide and the paper, or between the side guides and the paper in the paper tray. Make sure there are no gaps. See p.15 “Loading Paper”.
	Paper is either too thick or too thin. See p.5 “Paper and Other Media Supported by This Printer”.
	Paper has already been printed on. See p.5 “Paper and Other Media Supported by This Printer”.
	Number of paper set in the tray exceeds the limit. Confirm that the top of the stack is not higher than the limit mark inside the tray. See p.5 “Paper and Other Media Supported by This Printer”.
	Paper is static. Use paper that has been stored properly. See p.5 “Paper and Other Media Supported by This Printer”.
	When loading paper, separate paper from each other
Paper gets wrinkles.	Paper is damp. Use paper that has been stored properly. See p.5 “Paper and Other Media Supported by This Printer”.
	Paper is too thin. See p.5 “Paper and Other Media Supported by This Printer”.
	There may be a gap between the rear guide and the paper, or between the side guides and the paper in the paper tray. Make sure there are no gaps. See p.15 “Loading Paper”.
	The fusing unit is deteriorated or damaged. Replace the unit. See p.44 “Replacing the Fusing Unit”.
Paper is not fed from the selected tray.	When you are using a Windows operating system, the printer driver settings override those set using the control panel. Set the desired input tray using the printer driver. See the printer driver Help.
A printed image is different from the image on the computer's display.	When you use some functions, such as enlargement and reduction, the layout of the image might be different from that displayed in the computer display.
	You might have selected to replace True Type fonts with printer fonts in the printing process. To print an image similar to the image on the computer, make the settings to print out True Type fonts as an image. See the printer driver Help.

Status	Possible Causes, Descriptions, and Solutions
It takes too much time to resume printing.	The data is so large or complex that it takes time to process it. If the **Data In** indicator is blinking, the data is being processed. Just wait until it resumes.
	If OHP transparencies or glossy paper is being used, printing takes more time to start.
It takes too much time to complete the print job.	Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data. Changing the settings with printer driver may help to speed up printing. See the printer driver Help.
	The data is so large or complex that it takes time to process it. If the **Data In** indicator is blinking, the data is being processed. Just wait until it resumes.
	If **[Waiting...]** appears on the display, the printer is now warming up. Wait for a while.
Images are cut off, or excess pages are printed.	If you are using paper smaller than the paper size selected in the application, use the same size paper as that selected in the application. If you cannot load paper of the correct size, use the reduction function to reduce the image, and then print. See the printer driver Help.
The color of the printout is different from the color on the computer's display.	The colors made using color toner are different from colors displayed on the display in its production system.
	When **[Toner Saving]** is checked under the **[Print Quality]** tab in the printer driver's dialog box, the color gradation may appear differently. See the printer driver Help.
The color of the printout is different from the color specified.	If a specific color is missing, turn the power switch off and on. If this does not solve the problem, contact your sales or service representative.
Color changes extremely when adjusted with the printer driver.	Do not extreme settings for the color balance under the **[Print Quality]** tab in the printer driver's dialog box. See the printer driver Help.
Photo images are coarse.	Some applications lower the resolution for making prints.
Color documents are printed in black and white.	The printer driver is not set up for color printing. See the printer driver Help.
	Some applications print color files in black and white.
Fine dot pattern does not print.	Change the **[Dithering:]** setting in the printer driver's dialog box. See the printer driver Help.

Status	Possible Causes, Descriptions, and Solutions
Solid areas, lines or text are shiny or glossy when created as a mixture of cyan, magenta, yellow.	Select **[K (Black)]** for **[Gray Reproduction (Text/Line Art):]** in the printer driver's dialog box. See the printer driver Help.
Black gradation is not natural.	Select **[CMY + K]** for **[Gray Reproduction (Text/Line Art):]** in the printer driver's dialog box. See the printer driver Help.
Solid lines are printed as broken lines.	Change the **[Dithering:]** setting in the printer driver's dialog box. See the printer driver Help.
A color is missing or partially blurred.	Paper is damp. Use paper that has been stored properly. See p.5 “Paper and Other Media Supported by This Printer”.
	Toner is almost depleted. When the **[Add Toner XXX]** or **[Toner is almost empty: XXX]** message appears on the display panel, or the toner end LED on the control panel is lit, replace the toner cartridge of the displayed color. See p.28 “Replacing the Toner Cartridge”.
	When **[Replace Black PCU]** or **[Replace Color PCU]** appears on the display, replace the photo conductor unit. See p.35 “Replacing the Photo Conductor Unit”.
	Condensation may have collected. If rapid change in temperature or humidity occurs, use this printer only after it has acclimatized.
The whole printout is blurred.	Paper is damp. Use paper that has been stored properly. See p.5 “Paper and Other Media Supported by This Printer”.
	If you select **[Toner Saving]** on the **[Print Quality]** tab in the printer properties dialog box, printing is generally less dense. See the printer driver Help.
	Toner is almost depleted. When the **[Add Toner XXX]** or **[Toner is almost empty: XXX]** message appears on the display panel, or the toner end LED on the control panel is lit, replace the toner cartridge of the displayed color. See p.28 “Replacing the Toner Cartridge”.
	When **[Replace Black PCU]** or **[Replace Color PCU]** appears on the display, replace the photo conductor unit. See p.35 “Replacing the Photo Conductor Unit”.
	Condensation may have collected. If rapid change in temperature or humidity occurs, use this printer only after it has acclimatized.

Status	Possible Causes, Descriptions, and Solutions
White streaks or color streaks appear.	Toner is almost depleted. When the **[Add Toner XXX]** or **[Toner is almost empty: XXX]** message appears on the display panel, or the toner end LED on the control panel is lit, replace the toner cartridge of the displayed color. See p.28 “Replacing the Toner Cartridge”.
	When **[Replace Black PCU]** or **[Replace Color PCU]** appears on the display, replace the photo conductor unit. See p.35 “Replacing the Photo Conductor Unit”.
White or color rivers appear.	When **[Replace Black PCU]** or **[Replace Color PCU]** appears on the display, replace the photo conductor unit. See p.35 “Replacing the Photo Conductor Unit”.
The backs of printed sheets are blemished.	When removing a jammed sheet, the inside of the printer may have become dirtied. Print several sheets until they come out clean.
	If document size is larger than paper size, e.g. A4 document on B5 paper, the back of the next printed sheet may be dirtied.
If rubbed with your finger, it smears out.	The setting of the paper may not be correct. For example, although thick paper is used, the setting for thick paper may not be set. • Check the paper settings of this machine. See p.9 “Types of Paper and Other Media”. • Check the paper settings of the printer driver. See the printer driver Help.
	The fusing unit is deteriorated or damaged. Replace the unit. See p.44 “Replacing the Fusing Unit”.

Status	Possible Causes, Descriptions, and Solutions
PDF Direct Print is not executed (PDF file is not printed).	You must install an optional hard disk drive or set the value of the **[RAM Disk]** in the System Menu to 2 MB or higher. Reference See “Attaching Printer Hard Disk Type 3000”, Setup Guide for optional hard disk drive installation. For **[RAM Disk]**, see the “System Menu”, Software Guide.
	After adding a memory unit and set the value of the **[RAM Disk]** in the System Menu to 16 MB, value of the **[RAM Disk]** returns to 0 MB if the memory unit is removed. If this happens, reset the value of the **[RAM Disk]** to 2 MB or higher. Reference For **[RAM Disk]**, see the “System Menu”, Software Guide.
	When printing a PDF with a password set, set the password of the PDF file using the **[PDF: Change PW]** menu in **[PDF Menu]** or Web Image Monitor. Reference For **[PDF: Change PW]**, see the “PDF Menu” , Software Guide. For Web Image Monitor, see Help.
	PDF files not allowed to be printed by the PDF file security setting cannot be printed.
As a result of printing using PDF Direct Printing, characters are missing or misshapen.	Before printing, embed the font in the PDF file to be printed.
The paper size appears on the control panel and printing is not performed with PDF Direct Print.	When using PDF Direct Print, printout requires paper set within the PDF file. When a message indicating a paper size appears, either place the indicated size in the paper tray, or perform Form Feed. Also, if **[Sub Paper Size]** in the System Menu is set to **[Auto]**, printing is performed assuming letter size and A4 size to be the same size. For example, When a PDF file set to A4 size paper is printed using PDF Direct Print and letter size paper is installed in the paper tray, the file will print out. This applies similarly to the opposite case.

If the problem cannot be solved, contact your sales or service representative.

Additional Troubleshooting

Problems	Solutions
Strange noise is heard.	If a supply was recently replaced or an option attached in the area the strange noise is coming from, check the supply or option is properly attached. If the strange noise persists, contact your sales or service representative.
No e-mail is received when an Alert occurs, and after resolving an Alert.	Confirm **[Notify by Email]** is **[On]** using the System Menu on the Control Panel. See “System Menu”, Software Guide.
	Access the printer through the Web browser, log on as an Administrator on the Web Image Monitor, and then confirm the following settings in **[E-mail Notification]**: • Device E-mail Address • Groups to Notify • Select Groups/Items to Notify Reference For details about the settings, see Web Image Monitor Help.
	Access the printer through the Web browser, log on as an Administrator on the Web Image Monitor, and then confirm the settings of the SMTP server in **[E-mail]**. Reference For details about the settings, see Web Image Monitor Help.
	When the power is turned off before the e-mail is transmitted, the e-mail will not be received.
	Check the e-mail address set for the destination. Confirm the printer's operation history using the Web Image Monitor's System Log menu in **[Network]**. If the e-mail was sent but not received, it is possible the destination was incorrect. Also check the information concerning error mail from the e-mail server.
The setting for **[Notify by Email]** on the System Menu was changed from **[Off]** to **[On]**, but e-mail is not arriving.	After changing the setting, turn the main unit's power off and then back on again.
Error notification e-mail was received, but no error-solved e-mail is received.	Check e-mail is set for sending using the Web Image Monitor's **[E-mail Notification]** at the time the error was fixed. You must click the **[Edit]** button of **[Detailed Settings of Each Item]** in **[E-mail Notification]**, and set **[Notify when error:]** to **[Occurs & Fixed]** on the displayed screen. Reference For details about the settings, see Web Image Monitor Help.

Problems	Solutions
Alert Resolving is set for sending e-mail, but no Alert-resolved e-mail is sent.	If the power of the main unit is turned off after an Alert occurs, the Alert is resolved during the time the power is off: no Alert-resolved e-mail is sent.
Alert Occurrence and Alert Resolving are set for sending e-mail, but while no Alert Occurrence mail is received, Alert-resolved e-mail is received.	Alert-notification e-mail is not sent if the problem is resolved before sending. However, an Alert-resolved e-mail is sent.
Alert-notification level was changed, and e-mail stopped arriving.	If an Alert-notification e-mail, set with the earlier notification level, arrives, later e-mail will not be sent, even if the notification level is changed after.
When no date information is included in sent e-mail, the mail server has a malfunction.	Make the setting for obtaining time information from the SNTP server. Refer to the Web Image Monitor's Help to the settings.
Printing using Bluetooth is slow.	When using the optional Bluetooth interface unit, do the following; • Transmit fewer print jobs. • Make sure no IEEE 802.11b (wireless LAN) or other Bluetooth devices are in use. Note ❒ Interference may occur with the IEEE 802.11b wireless LAN interface board. Such interference may affect the transmission speed and other functions. • Transmissions between the client computer and the machine can be blocked by obstructions. Move the machine or client computer if necessary. Note ❒ When you use a Bluetooth connection, print jobs are transmitted relatively slowly.

If the machine is still not operating satisfactorily, contact your sales or service representative. Consult with the store where the printer was purchased for information about the location of sales or service representatives.

Removing Misfed Paper

An error message appears if a paper misfeed occurs. The error message gives the location of the misfeed.

Important

- ❒ Misfed paper may be covered in toner. Be careful not to get toner on your hands or clothes.
- ❒ Toner on prints made after removing misfed paper may be loose (inadequately fused). Make a few test prints until smudges no longer appear.
- ❒ Do not forcefully remove misfed paper, it will tear. Torn pieces remaining inside the printer will cause further misfeeds and possibly damage the printer.

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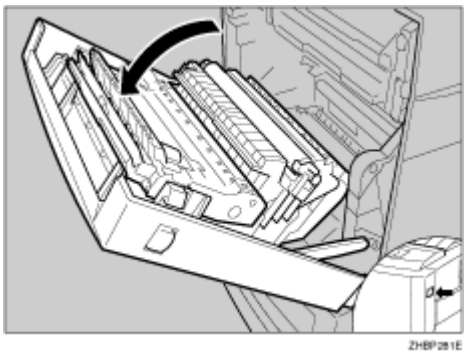
When “Remove Misfeed A: Internal Path” Appears

⚠CAUTION

- *The inside of this machine gets very hot. Do not touch parts labelled “⚠” (hot surface). Touching “⚠” labelled parts could result in burns.*

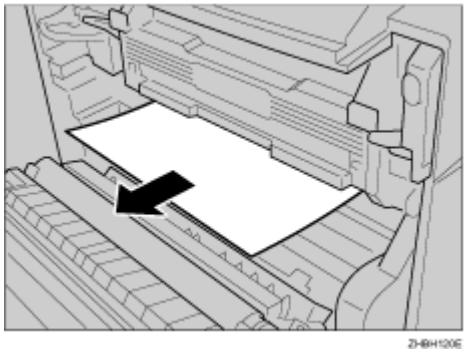
1 Open the front cover by pushing the front cover release button.



Note

❒ Close the bypass tray if it is extended. If the bypass tray is extended, the front cover does not open.

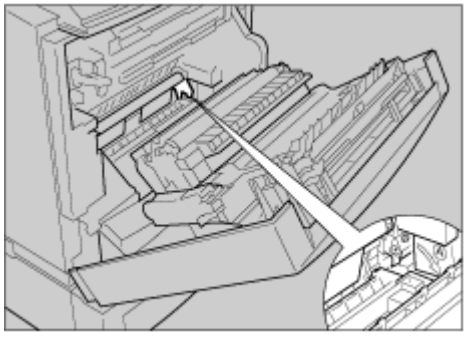
2 Carefully remove any misfed paper.



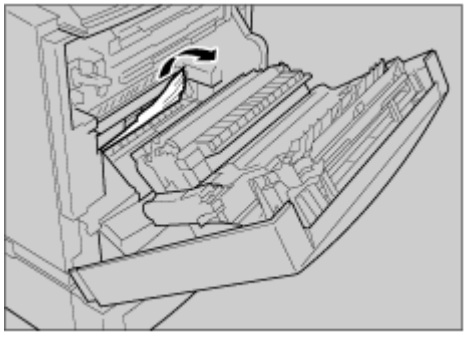
Important

❒ If misfed paper is difficult to move or stuck, proceed to the next step. Do not pull forcefully on stuck or jammed paper.

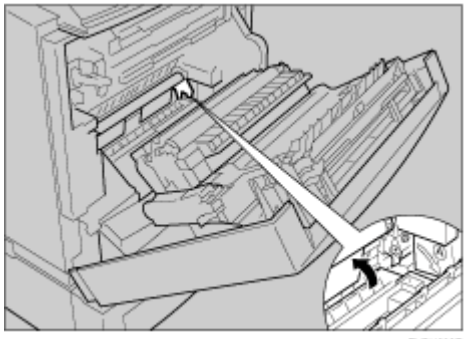
3 **Pull part “A” in the direction of the arrow, and then open the cover.**



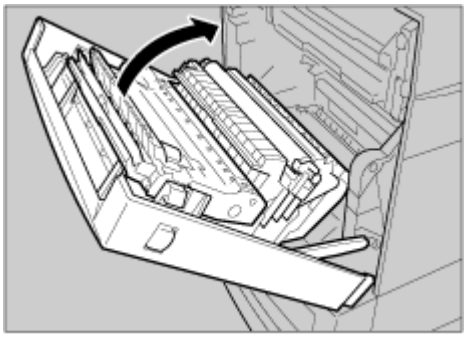
4 **Remove any misfed paper.**



5 **Close the cover.**



6 Close the front cover carefully.

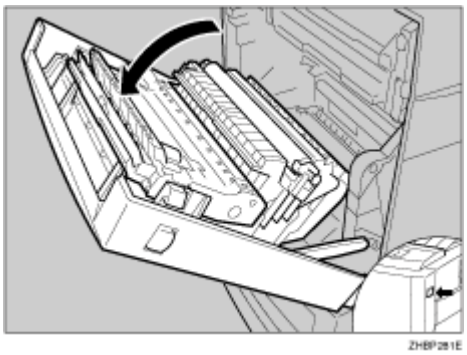


When “Remove Misfeed B: Fusing Unit” Appears

⚠CAUTION

- *The inside of this machine gets very hot. Do not touch parts labelled “⚠” (hot surface). Touching “⚠” labelled parts could result in burns.*

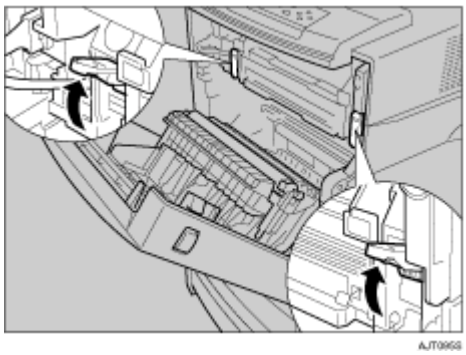
1 Open the front cover by pushing the front cover release button.



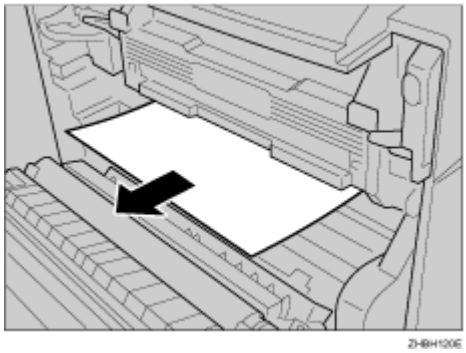
Note

❒ Close the bypass tray if it is extended. If the bypass tray is extended, the front cover does not open.

2 Pull out levers “B1” on the left and right.



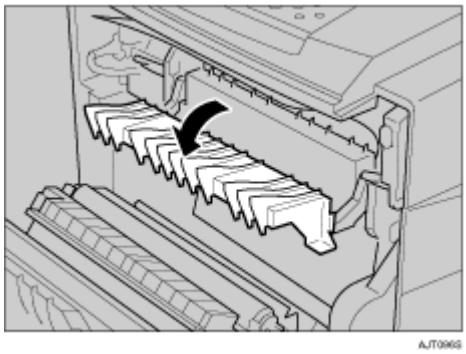
3 **Remove any misfed paper.**



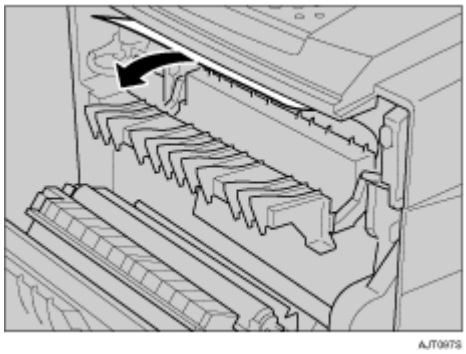
Important

❒ If misfed paper is difficult to move or stuck, proceed to the next step. Do not pull forcefully on stuck or jammed paper.

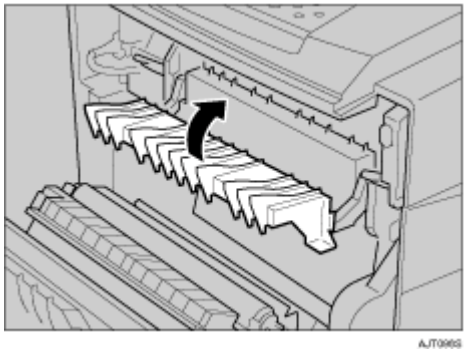
4 **Pull part "B2" toward the front, and then open the guide board.**



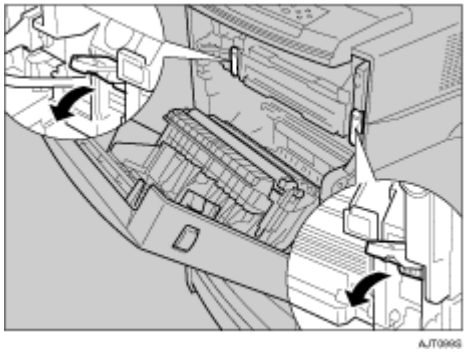
5 **Remove any misfed paper.**



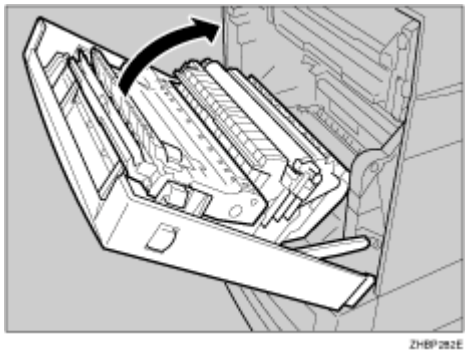
6 Return the guide board.



7 Return levers “B1” on the left and right.

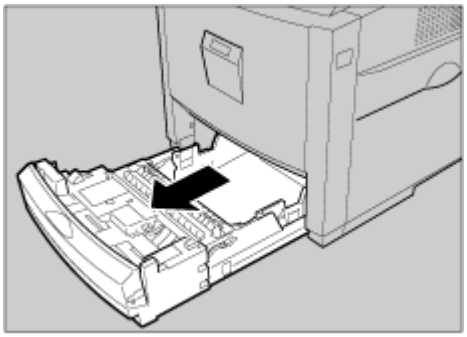


8 Close the front cover carefully.



When “Remove Misfeed Y: Paper Tray” Appears

1 Pull out the tray.

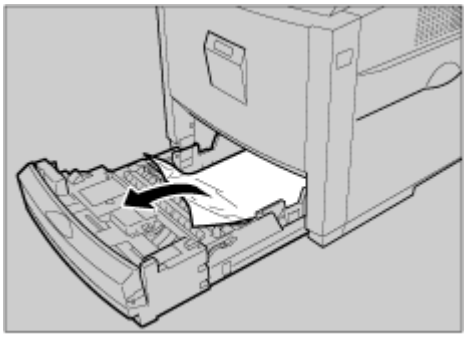


Important

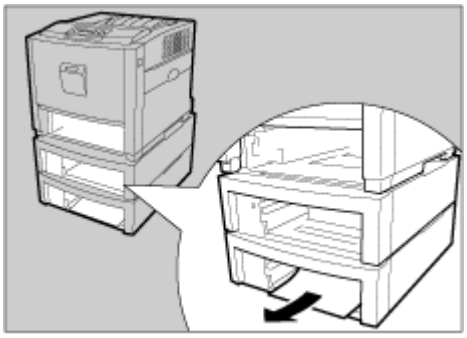
❒ Do not pull the tray out forcefully. If you do, the tray might fall and cause an injury.

2 Remove any misfed paper.

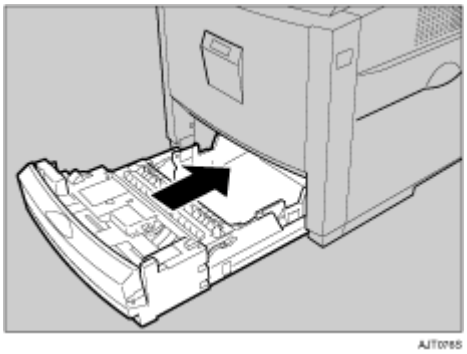
❖ Tray 1



❖ Tray 2/3



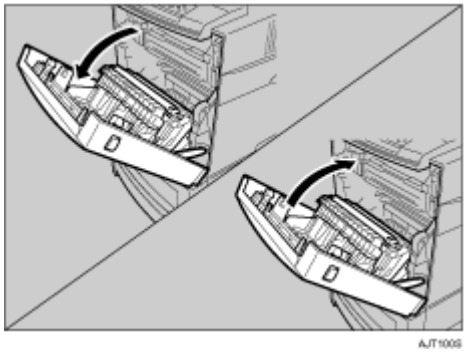
3 **Slide the paper tray fully into the printer.**



Important

❒ Misfeeds can occur if the paper tray is not fully inserted. Make sure it is fully inserted.

4 **Open the front cover by pushing the front cover release button, and then close it to reset the misfeed condition.**



Note

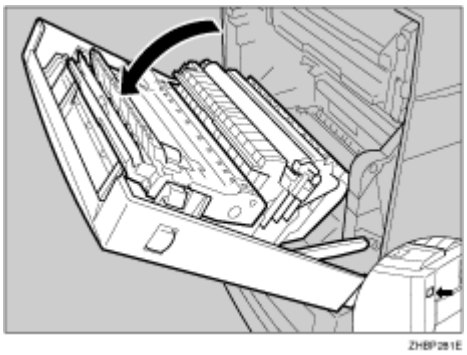
❒ This procedure is also applicable to both the paper tray and the optional paper feed unit.

When “Remove Misfeed Z: Duplex Unit” Appears

⚠CAUTION

- *The inside of this machine gets very hot. Do not touch parts labelled “⚠” (hot surface). Touching “⚠” labelled parts could result in burns.*

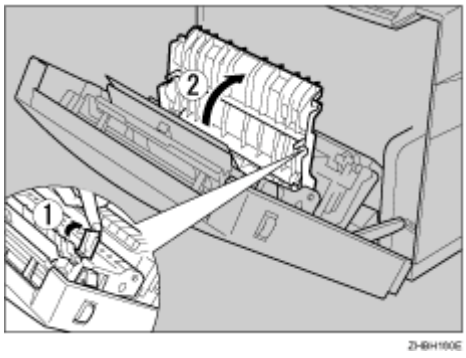
1 Open the front cover by pushing the front cover release button.



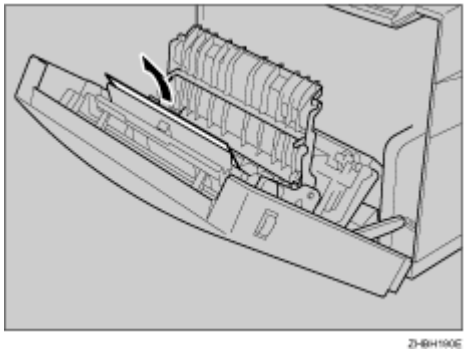
Note

❒ Close the bypass tray if it is extended. If the bypass tray is extended, the front cover does not open.

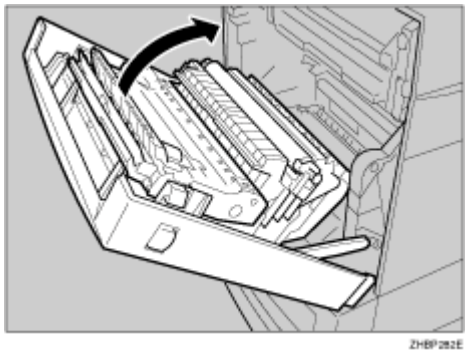
2 Pull the lever marked “PULL” on the duplex unit (①), and then pull up the duplex unit until it stops (②).



3 **Remove any misfed paper.**



4 **Close the front cover carefully.**



Moving and Transporting the Printer

⚠CAUTION

- *When moving the machine, each person should hold the handles that are located on opposite sides, and then lift it slowly. Lifting it carelessly or dropping it may cause an injury.*
- *When you move the printer, remember to unplug the power cord from the wall outlet to avoid a fire or an electric shock.*
- *When you pull out the plug from the socket, grip the plug, not the cord, to avoid damaging the cord and causing a fire or an electric shock.*
- *When moving the printer after use, do not take out any of the Toners, Photo Conductor Units, nor the waste toner bottle to prevent toner spill inside the machine.*

Repack the printer in its original packing materials for transporting.

Note

❒ The printer weighs approximately 32 kg (70.5 lb.).

Important

❒ Be sure to disconnect all cables from the printer before transporting it.

❒ The printer is a precision piece of machinery. Take care to avoid damage during shipment.

❒ If the optional paper feed unit is installed, remove it from the printer, and then move them separately.

Moving the Printer

⚠CAUTION

- *When lifting the machine, use the inset grips on both sides. Otherwise the printer could break or cause an injury if dropped.*
- *Before moving the machine, unplug the power cord from the wall outlet. If the cord is unplugged abruptly, it could become damaged. Damaged plugs or cords can cause an electrical or fire hazard.*

Moving the printer in a short distance

1 Be sure to check the following points:

- The power switch is turned off.
- The power cable is unplugged from the wall outlet.
- The interface cable is unplugged from the printer.

2 If the external options are installed, remove them.

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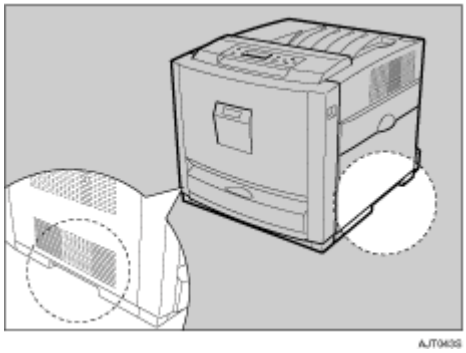
See Setup Guide and follow the steps backwards for removing options.

3 Lift the printer with two people by using the inset grips on both side of the printer, and then move it horizontally to the place where you want to install it.



4 If you removed options, reinstall them.

See Setup Guide for installing options.

Note

❒ Be sure to move the printer horizontally. To prevent toner from scattering, move the printer slowly.

❒ If the optional paper feed unit is installed, remove it from the printer, and then move them separately.

Transporting the Printer

When transporting the printer, leave consumables such as the toner cartridge, photoconductor unit, and waste toner bottle in place inside the machine.

Consumables

⚠CAUTION

- *Our products are engineered to meet the highest standards of quality and functionality. When purchasing expendable supplies, we recommend using only those specified by an authorized dealer.*

Toner Cartridge

Toner cartridge	Average printable number of pages per bottle *1
Color LP Toner Cassette Type165 Black	7,000 pages
Color LP Toner Cassette Type165 Cyan Color LP Toner Cassette Type165 Cyan SY	6,000 pages 2,500 pages
Color LP Toner Cassette Type165 Magenta Color LP Toner Cassette Type165 Magenta SY	6,000 pages 2,500 pages
Color LP Toner Cassette Type165 Yellow Color LP Toner Cassette Type165 Yellow SY	6,000 pages 2,500 pages

*1 A4/letter 5% test chart, 3 pages/ job.

The number of printable pages varies depending on which of the two different types of toner cartridge you have installed.

Note

❒ If toner cartridges are not changed when necessary, printing will become impossible. We recommend keeping a stock of bottles or purchasing them soon.

❒ The actual number of printable pages varies depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.

❒ Toner cartridges may need to be changed sooner than indicated above due to deterioration over the period of use.

❒ Toner cartridges (consumables) are not covered by warranty. However, if there is problem, contact the store where they were purchased.

❒ When you first use this printer, use the four toner cartridges packaged with the printer.

❒ Numbers of pages that can be printed using the toner cartridge supplied with this printer are as follows:

Toner Cartridge	Average printable number of pages per bottle
Black, Cyan, Magenta, Yellow	2,500 pages

Waste Toner Bottle

Name	Average printable number of pages *1
Waste Toner Bottle Type 165	14,000 pages

*1 A4/letter 5% test chart, 3 pages/ job.

Note

❒ The actual number of printable pages varies depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.

❒ If the waste toner bottles are not changed when necessary, printing will become impossible. We recommend keeping a stock of bottles or purchasing them soon.

Photo Conductor Unit

Name	Average printable number of pages *1
Photo Conductor Unit Type 165 Black	15,000 pages
Photo Conductor Unit Type 165 Color	15,000 pages

*1 A4/letter 5% test chart, 3 pages/ job.

Note

❒ The actual number of printable pages varies depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.

❒ If the photo conductor unit is not changed when necessary, the quality of printing is not guaranteed. We recommend keeping a stock of photo conductor units or purchasing one soon.

❒ Photo conductor unit (consumables) are not covered by warranty. However, if there is problem, contact the store where they were purchased.

Intermediate Transfer Unit (Transfer Unit)

Name	Average printable number of pages *1
Intermediate Transfer Unit Type 165	100,000 pages

*1 A4/letter 5% test chart, 3 pages/ job.

Note

❒ The actual number of printable pages varies depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.

❒ If the transfer unit is not changed when necessary, the quality of printing is not guaranteed. We recommend keeping a stock of transfer unit or purchasing one soon.

Specifications

Mainframe

❖ **Configuration:**
Desktop

❖ **Print Process:**
Laser beam scanning & Electrophotographic printing
4 drums tandem method

❖ **First Print Speed:**
Monochrome: 13.5 sec or less (A4)
Color: 14.5 sec or less (A4)

Note

❒ If the printer has not been used for a while, there may be a short delay before the first page starts printing.

❖ **Printing Speed:**
Monochrome: Maximum 21 pages per minute (A4) *1
Color: Maximum 21 pages per minute (A4) *1

*1 Printing speed may vary depending on the setting up environment.

❖ **Resolution:**
1200 × 1200 dpi (RPCS, PostScript 3, PCL 6)
1200 × 600 dpi (RPCS, PostScript 3, PCL 6)
600 × 600 dpi (RPCS, PostScript 3, PCL 5c/6)
300 × 300 dpi (PCL 5c *1)

*1 monochrome only

❖ **Paper size:**
See p.5 “Paper and Other Media Supported by This Printer”.

❖ **Paper Weight:**
See p.5 “Paper and Other Media Supported by This Printer”.

❖ **Media Type:**
See p.5 “Paper and Other Media Supported by This Printer”.

❖ **Paper Output Capacity:**
Standard 250 sheets (80 g/m^2, 20 lb.)

❖ **Paper Input Capacity:**

Standard Paper Tray	530 sheets *1
Bypass Tray	100 sheets *1

Optional Paper Feed Units	530 sheets × 1, 530 sheets × 2 [*1]

[*1] Paper weight: 80 g/m^2 (20 lb.)

❖ **Power Source:**
120 V, 60 Hz, 11 A or more

❖ **Power Consumption:**

Printing	1200 W or less (No power is used during power off.)
Energy Saver	9 W or less

❖ **Warm-up Time:**
Less than 30 seconds (23°C, 71.6 F) [*1]

[*1] When no error.

❖ **Dimensions:**

	Width	Depth	Height
Printer only (tray not extended)	419 mm (16.5 inches)	536 mm (21.1 inches)	398 mm (15.7 inches)

❖ **Weight:**
Approximately 32 kg (70.5 lb.) (toner cartridges and power cord included)

❖ **Noise Emission [*1]:**

Sound Power Level

	Mainframe only
Stand-by	49 dB (A)
During Printing	63 dB (A)

Sound Pressure level [*2]

	Mainframe only
Stand-by	36 dB (A)
During Printing	50 dB (A)

[*1] The preceding measurements made in accordance with ISO7779 are actual values.
[*2] Measured at the position of a bystander.

❖ **Memory:**
Standard 128 MB, up to 512 MB (with the optional Memory Unit)

❖ **Interface:**
Standard:

- Ethernet (10/100Base-TX)

- USB2.0
  It requires a USB computer port and cable that support USB 2.0.

Optional:

- IEEE 1394 (SCSI print, IP over 1394)
- IEEE 802.11b (Wireless LAN)
- Parallel (Bidirectional IEEE1284)
- Bluetooth

❖ **Printer Language:**
RPCS, PJL, PCL 5c/6, PostScript 3, PDF

❖ **Fonts:**
PCL 5c
Agfa Monotype 35 Intellifonts, 10 TrueTypefonts, and 1 Bitmap font.
PostScript 3
136 fonts (Type 2:24, Type 14:112)

Options

Paper Feed Unit Type 3000

❖ **Paper size:**
A4, B5, Letter ($8^1/_2 \times 11$ inches), Legal ($8^1/_2 \times 14$ inches)

❖ **Dimensions (W × D × H):**
410 × 536 × 147 mm (16.2 × 21.1 × 5.8 inches)

❖ **Paper weight:**
60.2 - 104.7 g/m^2, (16 - 28 lb.)

❖ **Weight:**
Less than 7.5 kg (16.4 lb)

AD440 (Duplex Unit)

❖ **Dimensions (W × D × H):**
325 × 237 × 169 mm (12.8 × 9.4 × 2.7 inches)

Note

❒ This option is built into the machine.

❖ **Paper size:**
A4, B5(JIS), $8\ ^1/_2 \times 14$, $8^1/_2 \times 11$

❖ **Paper weight:**
60.2 - 104.7 g/m^2 (16 - 28 lb.)

❖ **Weight:**
Less than 0.8 kg (1.7 lb.)

Printer Hard Disk Type 3000

❖ **Storage Capacity (Formatted):**
10 GB

❖ **Specifications:**

- Spool print data to collate
- Spool Sample Print/Locked Print data
- Store PostScript fonts
- Store log data

Note

❒ You can install PostScript fonts with this optional hard disk drive. With Mac OS, types of fonts supported are PostScript Type 1 and PostScript Type 2. To download them, use Printer Utility for Mac.

User Account Enhance Unit Type E

❖ **Capacity:**
128 KB

- Store User Code (up to 500 users)

Memory Unit Type D 128MB/Memory Unit Type E 256MB

❖ **Module Type:**
SO-DIMM (Small Outline Dual-in-line Memory Module)

❖ **Memory Type:**
SDRAM (Synchronous Dynamic RAM)

❖ **Number of Pins:**
200 pins

IEEE 1394 Interface Board Type B

❖ **Interface:**
IEEE Std. 1394-1955 compliant, IEEE Std. 1394-2000 compliant.

❖ **Interface Connector:**
IEEE 1394 (6 pins × 2)

❖ **Required cable:**
IEEE 1394 interface cable (6 pins x 4 pins, 6 pins x 6 pins)

Important

❒ You cannot plug devices together to create loops.

❒ Do not use a cable more than 4.5 meters long.

❖ **Connectable number of devices in a bus:**
Maximum 63

❖ **Allowed cable hops in a bus:**
Maximum 16

❖ **Data Transmission:**
400 Mbps (Maximum)

❖ **Power supply:**
Non power supply
Cable Power repeated (IEEE 1394a-2000 compliant)

IEEE 802.11b Interface Unit Type H

❖ **Transmission Spec.:**
Based on IEEE 802.11b (Wireless LAN)

❖ **Protocol:**
TCP/IP, NetBEUI, IPX/SPX, AppleTalk

Note

❒ SmartDeviceMonitor and Web Image Monitor are supported.

❖ **Data Transfer Speed:**
Auto select from below speed
1 Mbps, 2 Mbps, 5.5 Mbps, 11 Mbps

❖ **Frequency Range:**

- Inch version:
  2412-2462 MHz (1-11 channels)
- Metric version:
  2412-2472 MHz (1-13 channels)

❖ **Transmittable Distance:**
1 Mbps 400 m *1
2 Mbps 270 m *1
5.5 Mbps 200 m *1
11 Mbps 140 m *1

*1 These figures are a guideline for outdoor use. In general, the transmittable distance indoors is 10-100 m, depending on the environment.

❖ **Transmission Mode:**
ad hoc mode and infrastructure mode

IEEE 1284 Interface Board Type A

❖ **Transmission Spec.:**
IEEE 1284

❖ **Required cable:**
Standard IEEE 1284 compliant Micro Centronics 36 pin cable

Bluetooth Interface Unit Type 3245

❖ **Supported Profiles:**

- SPP (Serial Port Profile)
- HCRP (Hardcopy Cable Replacement Profile)
- BIP (Basic Imaging Profile)

❖ **Frequency Range:**
2 GHz ISM band

❖ **Data Transmission Speed:**
732 kbps

Note

❒ The transmission speed is adjusted according to factors such as the distance and obstacles between the devices, radio signal condition and Bluetooth adaptor.

❖ **Maximum Range:**
10 m